8-1957

An exploration of factors to be considered in developing a post-graduate program of teacher education in home science in the Lady Irwin College, New Delhi, India.

Sushella Dantyagi
University of Tennessee

To the Graduate Council:

I am submitting herewith a thesis written by Sushella Dantyagi entitled "An exploration of factors to be considered in developing a post-graduate program of teacher education in home science in the Lady Irwin College, New Delhi, India.." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Home Economics Education.

Druzilla Kent, Major Professor

We have read this thesis and recommend its acceptance:

Accepted for the Council:
Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

AN EXPLORATION OF FACTORS TO BE CONSIDERED IN DEVELOPING A POST-GRADUATE PROGRAM OF TEACHER EDUCATION IN HOME SCIENCE IN THE LADY IRWIN COLLEGE, NEW DELHI, INDIA

A THESIS

Submitted to
The Graduate Council
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

---

by

Susheela Dantyagi

August 1957

ACKNOWLEDGMENT

The writer's great debt of gratitude is to Dr. Druzilla Kent, Professor of Home Economics Education, University of Tennessee, whose challenging and stimulating criticism, unfailing interest, encouragement and guidance made this study possible. The writer also wishes to express her deep appreciation to the other members of her Advisory Committee for their guidance and assistance.

Appreciation is also expressed to Mrs. B. Tara Bai, Directress, Lady Irwin College, for her helpful suggestions concerning the thesis and for supplying data by air mail from New Delhi, India, for the study.

Grateful acknowledgment is likewise made at this time to the International Co-operation Administration without which it would not have been possible for the writer to enjoy the privilege of being a student at the University of Tennessee.

S.D.

TABLE OF CONTENTS

CHAPTER PAGE

CHAPTER PAGE

CHAPTER I

BACKGROUND AND PLAN FOR THE STUDY

Purposes of the Study

The purposes of the study were to examine those factors which seemed to be most important in developing a post-graduate[1] program of teacher education in Home Science in the Lady Irwin College, New Delhi, India, and to make certain recommendations for initiating the program.

It was hoped that this study would contribute to the solution of a critical problem--the pressing need for training hundreds of new well-prepared graduate teachers in Home Science. These college teachers must form the nucleus which can help to give sustained development to all Home Science professions throughout the country.

Basic Assumptions

1. A more effective base for the post-graduate program might be brought about through making some changes in the graduate (Bachelor of Science) program.

---

[1]The first degrees awarded at the end of the college courses in India are termed graduate degrees, such as, B.A. (Bachelor of Arts), B. Sc. (Bachelor of Science), B. Ed. (Bachelor of Education), etc. Higher degrees to those mentioned above are termed post-graduate degrees such as M.A. (Master of Arts), M. Sc. (Master of Science), M. Ed. (Master of Education), etc. A degree in advance of these is based chiefly on a research program and is termed Ph.D. or Doctor of Philosophy.

2. The post-graduate program designed to train leaders in the area of education would be dedicated, first of all, to the training of college teachers.
3. The post-graduate program for training leaders in the area of education would be broad enough to enable students to prepare for more than one field of teaching.
4. The entire program, graduate and post-graduate, would be closely related to home conditions.

Hypotheses to be Tested

The implementation of the proposed post-graduate program for Home Science in the Lady Irwin College might be hastened and strengthened by:

a. analyzing the graduate program of Home Science education as it exists in the college today, bringing about constructive changes, and
b. proposing adaptation of some of the methods of instruction being followed in the Home Economics graduate schools of the United States of America to the program in India.

Limitations

This study and exploration was limited to:

a. The present graduate program for Home Science--Bachelor of Science in Home Science, Lady Irwin College,

b. The graduate program for teacher training--Bachelor of Education in Home Science of the Lady Irwin College, New Delhi, India, and

c. The proposed post-graduate--Master of Science program for Home Science in the Lady Irwin College, New Delhi, India.

Most high schools in Delhi, at present, include Home Science in their program of studies. The college, as a result of the limited number of admissions available, selects only those students who have had a good general record and a background of Home Science in the high school plus completion of the pre-university class; the latter is known as a higher secondary class in India.

The Lady Irwin College, today, offers a three-year graduate program in Home Science leading to the Bachelor of Science (Home Science) degree. The prerequisite to this degree course is the higher secondary or pre-university course in India.

Home Science graduates interested in preparing for the teaching profession take an extra year's program of studies leading to the degree of Bachelor of Education.

This report includes:

a. A review of some of the present problems relating to the graduate program of 1. Bachelor of Science (Home Science) and 2. Bachelor of Education (Home Science) of the Lady Irwin College.

b. Suggestions for electives that might be offered as a part of these graduate programs (Bachelor of Science and Bachelor of Education in Home Science).

c. A critical review of the proposed post-graduate program (Master of Science) in Home Science in the Lady Irwin College.

d. Some of the key problems facing the Lady Irwin College in carrying out the Master of Science in Home Science Education, with proposals for solving them.

Procedures

1. Surveyed briefly the background of the philosophy of university education in India and evaluated it in terms of its service in meeting the needs of the students of the Lady Irwin College.
2. Examined the purpose of Home Science in colleges in India.
3. Analyzed the present graduate program of studies in the Lady Irwin College, in the light of the above purpose.
4. Suggested some proposals for re-organizing the graduate program in Home Science to help students elect courses in relation to her specific interests.
5. Explored the use of methods of instruction in use in the United States of America which might be adapted for use in the Lady Irwin College.

6. Reviewed the proposed program of studies leading to the Master of Science in Home Science Education in the Lady Irwin College.
7. Summarized key problems facing the Lady Irwin College in carrying out the Master of Science in Home Science Education.
8. Suggested possible ways of carrying out the proposed Master of Science program in education in the Lady Irwin College.

The study was undertaken as a result of a recognized need for more home economists to staff programs in higher education in India and in the Lady Irwin College in particular.

Historical Background of Present College Program in Home Science Education

The Government of India appointed a University Education Commission in 1948, under the distinguished chairmanship of Professor S. Radhakrishnan, to report on Indian University Education. The Commission in its report submitted in 1949, proposed far-reaching changes in the content, organization and structure of university education in India.

The Commission[v] was comprised of emminent educationists from India and abroad. It gave thoughtful consideration to the major

---

[v] See Appendix, page 135.

problems confronting the universities in improving and extending their educational programs.

The Commission recognized that the educational program designed to serve the needs of a free India would necessarily differ from the program designed to serve an India under British rule. Every democracy depends for its very life on a high standard of general, vocational, and professional education. The aim of democracy is to bring about radical economic and social changes in a peaceful way.

The attainment of independence in August 1947, brought India to the dawn of a new era. India is now awakening from a long slumber to a sense of its own dignity, prestige and power in the world. The fact that India decided to be a republic only served to underline the importance of education in a changed context--a national system of education which guaranteed to all the opportunity of leadership.

Writing on the impact of political change in India, the University Education Commission remarked:

> The academic problem has assumed new shapes. We have now a wider conception of the duties and responsibilities of Indian universities. They must enable the country to attain, in as short a time as possible, freedom from want, disease and ignorance, by the application and development of scientific and technical knowledge. India is rich in natural resources and her people have intelligence and energy and are throbbing with renewed life and vigour. It is for the universities to create knowledge and train minds who would bring together the two--material resources and human energies. . . . If our living standards are to be raised a radical change of spirit is essential.[2]

---

[2]The Report of the University Education Commission, December 1948-August 1949, Volume 1 (Delhi: Manager of Publications, Government of India, 1950), p. 33.

The crucial task of higher education of India today is to provide a variety of educational programs oriented to suit the needs of the people of India. Colleges must develop a better relationship between specialized training on the one hand and the transmission of a common cultural heritage toward a more enlightened citizenship on the other.

Dr. Rajendra Prasad, the President of India, in his inaugural address at the joint meeting of the Inter-University Board of India, speaking powerfully and imaginatively of what may well be called the basic problems of this age, said:

> The university has a great part to play as the future saviour of mankind. . . . It has been the historic mission of the university to transmit the social mind to each new generation and by doing so to shape and mould the mind of the latter. . . . It implies another function also, the function of integrating the diverse social minds simultaneously operating within a single human grouping. . . . The university should now integrate itself to the life of the people as a whole rather than remaining a limb of the classes only. . . . The position has now changed and the university can now effectively and directly serve the broad masses of humanity. Not only it can, but it must do so in order to gather the masses also under the sovereignty of the new mind. . . .
>
> There is another reason also . . . which requires that the university should become integrated with the life and aspirations of the masses. If the present insurrection of the masses against want is not led to creative and constructive channels it is likely to prove a volcanic lava which may destroy everything. . . . The need for guidance of this insurrection into right channels is an immediate one. . . . This integration of the university with the people is absolutely essential to produce in them the new mind which the new age demands . . . to

produce a world of plenty and peace.[3]

Jawaharlal Nehru, speaking of the scope of the activities of universities in the modern world, declared:

> Universities have much to teach in the modern world and their scope of activity ever enlarges. . . . The world will be ultimately saved, if it is to be saved, by the method and approach of science. But whatever part of learning we may pursue and however profitable it may seem to us, there is a certain basis and foundation without which the house of learning is built on shifting sands. It is for a University to realise and to lay stress on this essential basis and foundation, those standards of thought and action, which make an individual and nation. Above all this is necessary today, during this extremely rapid phase of transition when old values have almost left us and we have adopted no new ones. . . . A University stands for humanism, for tolerance, for reason, for progress, and for the adventure of ideas and for the search for truth. It stands for the onward march of the human race towards even higher objectives. If the Universities discharge their duty adequately then it is well with the nation and the people. But if the temple of learning itself becomes a home of narrow bigotry, and petty objectives, how then will the nation prosper or a people grow in stature?[4]

Home Science, as a part of university education, must focus its attention on the general objectives of higher education. These objectives are interwoven into the whole fabric of university education.

---

[3] Dr. Rajendra Prasad, "Address to Inter-University Board of India and the Executive Council of the Association of the Universities of the British Commonwealth," The Education Quarterly, 4:6-8, December 1957.

[4] Jawarhalal Nehru, "Speech Delivered at the Special Convocation of the Allahabad University," Independence and After (2nd ed.; New York: The John Day Company, 1950), pp. 115-118.

The Commission, describing how universities can play a basic role in the development of a people, said:

> . . . Mighty as are the political changes far deeper are the fundamental questions which will be decided by what happens in the universities. Everything is being brought to the test of reason, venerable theologies, ancient political institutions, time-honored social arrangements, a thousand things, which a generation ago looked as fixed as the hills. If India is to confront the confusion of our time, she must turn for guidance, not to those who are lost in the mere exigencies of the passing hour, but to her men of letters and men of science, to her poets and artists, to her discoverers and inventors. These intellectual pioneers of civilization are to be found and trained in the universities, which are the sanctuaries of the inner life of the nation.[5]

Influence of the Past on Education for Today

To know present India and to understand its social and cultural background one has to consider some of the salient features of its history. This review should not be for the mere purpose of extolling the past, for filling in the gaps of memory nor for perpetuating traditional beliefs and behaviours. Every individual is a child of tradition and has his definite place in the stream of history:

> We must be critically selective and use the past to illumine the present. We should not blindly give up the great values of our past, nor should we cling to beliefs simply because they are ancient. We should accept so much of ancient thought as is sympathetic to us.[6]

---

[5] The Report of the University Education Commission, op. cit., p. 33.

[6] Ibid., p. 30.

It should be remembered:

> If India is ever to be rescued from her poverty and misery, her mind needs to be emancipated so that she may cling to the essential and let go the meaningless accumulation of the ages, and if we do not fight against this accumulated rubbish of ages, we shall only court death.[7]

No nation is healthy that parts company with its traditions. Social development is an organic process. "We cannot start 'de novo,' as if India had no history and as if people could change their nature merely by taking thought."[8]

It has been pointed out that,

> The present which moves backward and forward, which is a summary of the past and a prophecy of the future is hallowed ground and all who tread on it should face it with the quality of reverence and the spirit of adventure. . . A life of strenuous endeavor for human betterment is not possible, if we are not persuaded that life has a meaning. The purpose of all education, it is admitted by thinkers of the East and the West, is to provide a coherent picture of the universe and an integrated way of life. A "samanvaya" of the different items of knowledge.
>
> Our educational system must find its guiding principles in the aims of the democratic social order for which it prepares in the nature of the civilization it hopes to build.[9]

---

[7]Cornelius J. Jesudason, "A Study of Tagore's Experiment in the Indianisation of Education in the Light of India's History," Rabindranath Tagore: India's Schoolmaster (New York: Columbia University, 1928), p. 57.

[8]S. Radharkrishnan, Religion and Society (London: George Allen and Unwin, Ltd., 1947), p. 118.

[9]Aims and Objectives of University Education in India (Delhi: Ministry of Education, Government of India, 1949), p. 3.

Religion and philosophy in India have always helped shape the home life of the people.

> . . . Man fulfills himself not by seeking the spirit alone, but by the realization of the values of earthly and spiritual good. . . .
>
> A broad based acceptance of all demands of life gave India's religious outlook its tremendous vitality. It is this vitality which has enabled it to withstand the shock of time and change and the challenge of new ways of thought. Fundamentally, therefore, it is philosophy which has determined culture in all its various manifestations.[10]

It is impossible to conceive even a single aspect of India's historical or modern development without reference to her religions and philosophies. These have entered into every phase of India's life; they have created a way of living through the long years of India's history; they are the source of her inspiration and strength. Deulkar wrote:

> Religion in India is a way of life. The simple pieties of today and the normal routine of devotions are as much a part of daily life as the physiological functions of the body. Thoughts and action alike are guided and influenced by religious philosophy. Fundamentally it is religious philosophy that has determined Indian culture. To many Indians religion is a unity of truth expressing itself in many different forms. This tolerant, sympathetic and pervasive spirit of ancient thought has been a unique heritage of the people. All fanaticisms that came to India and arose in India were dissolved by this attitude of tolerance and non-resistance; they ended up by being absorbed into the general pattern of beliefs. Importance or force was not faced with retaliation; the response for this was indifference. The Indian way of life has developed a tenacity of purpose against all sorts of

---

[10]Humayun Kabir, In Our Heritage (Delhi: National Information Publications, Manager of Publications, Government of India, 1950), p. 3.

> materialistic onslaughts. The power of the spirit of non-violence has influenced Indian culture and given it resilience and flexibility. Many have wondered at the persistence of ancient traditions through the rise and fall of kingdoms and empires, and through the long years of the country's growth. Many have also wondered at the unity of purpose among India's people, their acceptance of differences in and through the search for oneness for a common bond transcending the variations in her geography, her social organizations, her political beliefs, and the long succession of stages in her cultural development.[11]

The secret of this universality of approach, this readiness to assimilate fresh values in other civilizations lies in the Hindu idea of Dharma or virtue.

The Concept of Dharma

> The principles which we have to observe in our daily life and social relations are constituted by what is called in India, "Dharma." It is truth's embodiment in life, and the power to refashion our nature. Under the concept of Dharma, the Hindu brings the forms and activities which shape and sustain human life. We have many interests, various desires, conflicting needs, which grow and change in the growing. To round them off into a whole is the purpose of Dharma. The principle of Dharma rouses us to a recognition of the spiritual realities not by abstention from the world, but by bringing to its life, its business (artha) and its pleasures (kama), the controlling power of spiritual faith. Life is one, and in it there is no distinction of sacred and secular. Dharma artha, and kama go together. The ordinary avocations of daily life are in a real sense service of the Supreme.
>
> The basic principle of Dharma is the realization of the dignity of the human spirit, which is the dwelling place of the supreme. . . .

---

[11] Durga Deulkar, "An Approach to Teaching in the Basic Schools of India with Special Reference to Home Economics" (Unpublished thesis, University of Syracuse, College of Home Economics, 1954), p. 50.

> Dharma is an elastic tissue which clothes the growing body. . . . We must let this invisible force order and sustain life's increasing manifestations. If our social order is not to go to pieces, if our social thought is not to become incoherent, we must control and give meaning to the outward experiences which are increasingly pouring on us. The principle of Dharma, the scales of value are to be maintained in and through the stress of the new experiences. Only then will it be possible for us to have balanced or integral social progress. If we try to adopt inherited codes in changing conditions, instability, if not collapse will be the result. We should introduce changes today, and make the content of Hindu Dharma relevant to modern conditions. The permeations of new forces in our society, the industrialization of the country, the mixture of races by marriage, the emancipation of women are some of the questions which require to be considered in a liberal spirit.[12]

Pannikar, in explaining the relation of Hinduism to life in India, aptly said:

> The basic conception of Hinduism, which separates it from revealed religions believing in the finality of their revelations, is one of wide tolerance. . . .
>
> When Krishna says in the Gita,
> Yo Yatha mam propadyante stam thathaiva bhajamyaham,
> I give to everyone according to his worship,
> he proclaims a doctrine which is fundamental to all Hindu thought; that is, religion is not a matter of exclusive dogma. It is a wide tolerance, a feeling that others may be equally right in the methods they follow, that is the essence of Hindu teaching. This has coloured Hindu life to such an extent that it may truly be considered the differentiating mark of Indian culture, a respect for the faith and beliefs of others and a generous charity in understanding the approach of other people to the problems of life. It is this sense of tolerance and charity that gives harmony to the inner life of an Indian of culture, for, while he is firm in his own faith, he is prepared not merely to accept the truth of other beliefs but is

---

[12] Radhakrishnan, op. cit., pp. 104-119.

even prepared to approach them with an open mind.[13]

This, in a nutshell, is a part of the underlying philosophy of higher education in India. Emphasizing the value of an understanding of what is called, "the wisdom of the ages," the Commission of University Education goes on to say that any course of education intended to prepare men and women for the business of living should include philosophical studies, which deal with conduct and the ends of life.

Summary

The crucial task of higher education of India, today, is to provide a variety of educational programs re-oriented to suit the needs of the people of India.

The secret of the long and continuous life of Indian culture lies in its ideals of "Dharma" and tolerance based on a deep spirituality which marked all strata of life in India. Religion was seen as a unity of truth experiencing itself in many different creeds.

Universities are the organs of civilization. Universities must stand for the ideals of tolerance, progress, for the adventure of ideal and for the search for truth. Universities in India must develop that better relationship between specialized training on the

---

[13] K. M. Pannikar, "A Universal Outlook," Basis of Indian Culture (Washington, D. C.: Information Service of India, 1955), p. 2.

one hand and the transmission of the common cultural heritage toward a common citizenship of the other. The growth of a nation depends on its universities.

Higher education in Home Science must weave its objectives into the whole fabric of university education and must adjust itself to the challenge of life.

CHAPTER II

THE ROLE OF THE HOME SCIENCE PROGRAM IN UNIVERSITY EDUCATION IN INDIA

Home Science--An Instrument for Social Change

It would seem that a well-rounded program of Home Science as an instrument for social change, especially at the university level, could make a significant contribution to the building up of the democratic way of life.

National unity and progress requires a deeper foundation than political and economic development. From time immemorial this deep foundation has been laid in the home. Homes have been the havens of peace where loving hands cherished and kept the flame of the spirit alive. Today and always we need to make it burn with a renewed glow. It is the home that sets the standards for society and for the nation.

The ancient Hindu view exalted the homemaker. It was said that: "As all living beings depend upon the support of the mother, so do all stages of life depend upon the support of the house holder. . . ."[1]

---

[1] Nitimanjari--Folklore of India.

Much later, in the twentieth century, Tagore prophetically wrote:

> . . . The East and West have need of each other.
> Each civilization is the interpretation of some particular experience. The East and the West are necessary to each other because of their different aspects of truth.
> . . . By their present separatedness, East and West alike are now in danger of losing the fruit of their age-long labor. . . . For want of that union, the East is suffering from poverty and inertia, and the West from lack of peace and happiness. . . .
> India's contribution to the world will be in working out that vital principle to the solution of the most crucial problem of the day. . . . Only a synthesis of East and West will change the aspects of modern civilization--that must be worked out in the home.[2]

The University Education Commission reporting, in 1949, on the importance of the home and Home Science for building up national life held that:

> . . . the educated, conscientious mother who lives and works with her children in the home is the best teacher in the world of both character and intelligence. Much of what she learnt at school, her children get unconsciously as second nature by living in her company. In a society made up of such homes, children starting to school already have a background of information, understanding and culture which result in their getting more benefit from school than otherwise would be possible. . . . There cannot be an educated people without educated women. If general education had to be limited to men or to women, that opportunity should be given to women, for then most surely would it be passed on to the next generation. . . . Women should share with men the life and thought and interests of the times. For many women who crave to achieve standards of excellence, the home provides an excellent setting. For a woman to give the home design, beauty, order and character, without being herself a slave

---

[2]John Jesudason Cornelius, Rabindranath Tagore: India's Schoolmaster (New York: Columbia University, 1928), p. 88.

to home-keeping and without imposing onerous prohibitions and restrictions on the freedom of movement of children, is a high art. It will not be acquired by chance, and for many women its acquisition will be impossible except through education. . . .

The greatest profession of women is, and probably will continue to be, that of homemaking. . . . There has been little vocational guidance to help girl students to understand and appreciate the nature and opportunities of a woman's world and to prepare for it. . . .

A mastery of Home Economics is useful both to the homemaker and to the woman who, from choice or necessity is to practice a profession outside the home. . . .

The effective organization and management of a well-to-do home is a highly skilled calling. A Home Economics course should preserve and transmit the best of those ancient arts with such additions and improvements as modern science and research have made possible, and make them the possession of many. . . .

Probably there will be no quicker way to raise the standard of economy and efficiency in Indian life than to make women interested and competent in the efficient, economical and convenient planning and management of their homes. A spirit of pioneering, of experiment and research in the planning and management of even a simple home, can add variety and convenience. . . .

Good home management is more than a convenience for the housewife and her family; it is the foundation of the orderly state and the teaching of good home management is the first lesson in good government, as Confucius said. . . . A well designed course in Home Economics will include first, the elements of a general education. . . . Second, some "core courses" which are desirable for everyone in the field and third, more specialized courses as needed or desired by the individual student. . . .

The field of Home Economics is frequently looked upon as solely for women. The ultimate aim of the Home Economics curriculum is to help women and men to see the true dignity of homemaking, and to give it an ideal worth. This is the need for men as well as for women. There is room for a large extension of Home Economics teaching in Indian higher education. It should rank with dignity and worth with any other calling.[3]

---

[3]The Report of the University Education Commission, December 1948-August 1949, Volume 1 (Delhi: Manager of Publications, Government of India, 1950), p. 392-397.

The Lady Irwin College--History and Review

The Lady Irwin College was the first institution for young women in India to recognize the necessity for scientific and professional instruction in Home Science suited to Indian conditions--a necessity re-emphasized only recently by the University Education Commission.

The All India Women's Conference, in the late twenties, reviewing the Anglo-Indian education of the day, strongly felt that the system was an intellectual and material waste, since it was not vitally related to the life of the people. These pioneer women were painfully aware of the imperative need for social reform. Pondering on how to "Indianise" education for women, they came to the conclusion that, if there was a panacea for all of India's social ills, it was Home Science education run on national lines.

A brief history of the college in its prospectus states that:

> The inception of the Lady Irwin College may be traced back to the All India Women's Conference which met for the first time at Poona in January, 1927. . . .
> At its first annual meeting in 1930, it appointed an All India Committee consisting mainly of educational experts from every province and from some of the Indian States. After a careful and detailed investigation, it was decided that training in Home Science would be the most effective way of giving expression to the aims of the Association. In pursuance of this decision, the Lady Irwin College College came into being on November 10, 1932.[4]

---

[4] Prospectus Lady Irwin College (Delhi: I. M. H. Press, 1955-1956), p. 2.

Today, Home Science in the Lady Irwin College presses forward. The college takes pride in its progress since 1932, remembering that the acceleration coming in a short period of time is the result of many years of pioneer effort on the part of many people.

The college created the graduate course--Bachelor of Science (Home Science) in 1950 and two years later, in 1952, the Bachelor of Education course for training teachers in Home Science was organized.

Table I shows the growth in admissions to the graduate school.

The official record (1956-1957) of the Lady Irwin College reported that nearly 400 applicants had to be rejected for the diploma courses owing to the limited number of seats. Candidates who secured as much as 54 per cent, or second class marks had to be refused; first class students must secure more than sixty per cent, and few achieve this rating. The number of applicants for admission is increasing by leaps and bounds.

At present, there is a pressing demand from the community for the introduction of post-graduate courses in Home Science in the college.

A Plea for Home Science at the University Level--Need for Leaders

Speaking at the second Home Science Conference, Madras, 1952, the Directress of the Lady Irwin College, New Delhi, India, said:

> It is important that Home Science . . . be raised to the post-graduate standard. It is being increasingly felt that candidates who have graduated with Home Science,

TABLE I

ADMISSIONS TO THE GRADUATE SCHOOL OF THE LADY IRWIN COLLEGE, 1950-1956[a]

Degrees	Year of Admission						
	1950	1951	1952	1953	1954	1955	1956
Bachelor of Science							
First Year	29	50	45	49	50	56	45
Second Year	18	24	46	56	49	64	63
Third Year	--	9	18	30	46	48	60
Bachelor of Education							
Fourth Year	--	--	4	4	18	17	30

[a]B. Tara Bai, Directress, Lady Irwin College, New Delhi, India, Unpublished Material.

> do not possess the required knowledge and standard of education to teach the subject in the colleges. These graduates, therefore, are greatly handicapped at present, for higher studies in the subject, since none of the departments, including the arts and social science departments of the universities afford opportunities to the degree holders in Home Science for pursuing an M.A. course of studies in their subjects. The consequence of this is that the only way of furthering the prospects of such candidates and gaining higher knowledge is by going abroad. It is a matter of great regret that the Indian universities are not rising to the occasion to fill this gap in its educational standard. The Master's Degree should be instituted in every university that has provided for the B.A. course in Home Science.[5]

At a later date the Directress of the Lady Irwin College wrote:

> There is a great demand for post-graduate courses and many of the students who pass our B.A. would have gladly joined the M.Sc. if we had started one. . . . The Higher Secondary Schools have teachers with M.Sc. Degree and hence our graduates are unfavourably placed when they join the staff of such schools. Their scale of pay is not on a par with that of other subject teachers although our "Irwin graduates" teach the same classes. A post-graduate course in Home Science therefore has become an absolute necessity. . . .[6]

Dr. Ruth Wright, speaking at the Biennial Home Science Conference two years later, stressed the significance of Home Science on higher education:

> Provision should be made soon for one or two courses in Home Science or Home Economics in each University to be

---

[5] B. Tara Bai, Report of the All India Home Science Conference (Madras, India: Women's Christian College, 1952), p. 90.

[6] B. Tara Bai, Unpublished Material, Lady Irwin College, New Delhi, India, 1957.

> a recognized subject of study as acceptable toward a degree as a course in the humanities or in pure science. Planning of proper courses for women students means the provision of an academically acceptable course, which could be an optional subject. If the University requires two subjects, such as, for instance, a language and a second language, or another course, women students should be offered an optional or third branch of learning, replacing Economics and History, or Mathematics and Science with this one so vital to homes and families. Whether such a subject should be called Home Science or Home Economics is not as important as that women should have an opportunity to gain a degree which represents some competence in the profession of homemaking, which you and I believe will continue to be the fundamental one for all women.[7]

The University of Tennessee/India Home Science Contract

The progress of Home Science in India became more marked and soon culminated in the University of Tennessee/India Home Science Contract, 1955.

The early beginnings of this contract may be traced back to 1951 when the first Home Science conference met at Baroda under the presidentship of Mrs. B. Tara Bai, who was also the Directress of the Lady Irwin College. Mrs. B. Tara Bai, Mrs. Hansa Mehta and a few other representatives soon approached the Ministry of Education, Government of India, for foreign technicians and opportunities for training Indian Home Scientists abroad. The Ministry, recognizing the need for Home Science for national progress, approached the

---

[7] Dr. Ruth Wright, "Home Science and Higher Education," Proceedings of the Second Biennial Conference Home Science Association of India, Lady Irwin College, New Delhi, India, September 1956, p. 31.

Government of the United States of America for assistance.

In answer to this request, the International Co-operation Administration of America sent Dean Jessie W. Harris of the College of Home Economics of the University of Tennessee to India to make a survey of the situation. This bore fruit, and a group of technicians were sent to India under the University of Tennessee/India, Home Science Contract.

The two objectives of this Contract were:

1. To help institutions strengthen graduate courses in line with the changes in India.
2. To get more institutions with post-graduate programs to meet the need for college teachers.[8]

The advent of the American technicians into the field has instilled greater impetus and incentive to the Home Science activities in India.

The Lady Irwin College, with the help of the visiting professors, has prepared a tentative syllabus for a post-graduate curriculum in Home Science Education (see Appendix, page 137-142).

A Proposed Post-Graduate, Master of Science, Program in the Lady Irwin College, New Delhi, India

The Lady Irwin College, as a pioneer college for Home Science in India, as already mentioned, is launching its first step in what

---

[8]Unpublished annual report by the Inter-University Contract Team in Home Science, University of Tennessee/India, Madras, India, September 30, 1956, p. 8.

will be termed a post-graduate program in Home Science. This is one of the new fields in university education in India. Home Science is the only major learned profession for which there does not exist a well-defined program of preparation at the university level directed toward developing the skills which are essential for the graduate practitioner to possess. How best to prepare teachers for their important task of imparting education at the college level is still largely in the realm of opinion.

Home Science, as it has existed in the Lady Irwin College, and the present National Scheme of Education in India, have a common ideal. Both endeavor to stimulate students in developing values, attitudes, knowledge and skills that may help them to contribute constructively towards a growing free society. Lady Irwin College can now help in a larger measure towards the building up of the national educational system through developing the proposed post-graduate program of Home Science.

Training for Leadership

The problem of finding and preparing individuals to meet the requirements for democratic educational leadership has always been a major problem in education. The schools of the nation must have better leadership if democracy is to survive in India. Speaking of training of individuals--both men and women--for leadership, President Truman aptly remarked:

> Our national policies must be administered by men of broad experience, mature outlook and sound judgment. But there is a critical shortage of such men--men who possess the capacity to deal with affairs of state. . . . We need men who can turn a group of specialists into a working team and who can combine imagination and practicability into a sound public program. Men trained for this kind of administrative and political leadership are rare indeed.[9]

One of the main functions of universities, as said before, is to train men and women for wise leadership.

The primary function of the Lady Irwin College in regard to Home Science in the past was the preparation of homemakers. This will continue to be an important function of the college. The college, now, in order to influence a greater number of homemakers, must train workers for leadership roles in other colleges and in government positions. This function demands post-graduate programs for Home Science. Some of the goals of the post-graduate school in the proposed syllabus for the Lady Irwin College were:

1. To prepare students for the role of leadership in the field of Home Science.
2. To train post-graduate teachers who will serve as leaders in developing:
   a. A teacher training program for improving home and family living,

---

[9] Higher Education for American Democracy--A Report of the President's Commission on Higher Education, Volume I (New York: Harper and Brothers, 1947), pp. 88-89.

b. A variety of wage earning professions relating to Home Science.

3. To serve as a catalytic agent for the synthesis of cultures, working toward an integrated way of life and a one-world perspective.

The greatest task perhaps today is the task of developing in the individual a world consciousness, that universality, which is the essence of the infinite in man.

The post-graduate school of Home Science in the Lady Irwin College must be ready to educate scholars side by side with research workers--only then can Lady Irwin College hope to prepare scholars for college teaching. The strength of the undergraduate programs in colleges for Home Science or even those in the high schools will depend on the strength of the post-graduate college and vice versa. Together they rise or fall.

Summary

A well-rounded and integrated program of Home Science (as an instrument for effective social growth) can make a significant contribution to the building up of the national life of India.

The importance of homemaking, the need for scientific and professional instruction in Home Science for women in India was first visualized by the All India Women's Conference. Their efforts

culminated in the inauguration of the Lady Irwin College in 1931. The college has a history of steady growth and expansion; it now plans to introduce a program for training leaders--a program leading to the post-graduate degree, Master of Science, in Home Science Education.

CHAPTER III -- PART I

THE GRADUATE PROGRAM (BACHELOR OF SCIENCE) IN LADY IRWIN COLLEGE

Analysis of the Present Graduate Program (Bachelor of Science) in Lady Irwin College

Extension of the present Home Science program in Lady Irwin College to the post-graduate course makes it important to give critical consideration to the program upon which it will be based--the Bachelor of Science, or graduate program which is already in operation.

An educational program cannot be conducted without some kind of underlying philosophy, whether it be deliberately or unconsciously applied. The philosophy underlying the Home Science program in the Lady Irwin College, though not recorded in the official publications, is being developed in accordance with the aspirations expressed by the "All India Women's Conference Education Fund Association." This would seem to be in agreement with the philosophy of the Home Economics Leaders of America. Home Economics administrators in America expressed their ideas in the following accepted statement:

> Home Economics stands for--
> The ideal home life for today unhampered by the traditions of the past. The utilization of all resources of modern science to improve the home life. The freedom of the home from the dominance of things and their due subordination to ideals.
> The simplicity in material surroundings which will most free the spirit for the more important and permanent

interests of the home and of society.[1]

Other Home Economics administrators expressed their ideas in somewhat different terms.

> Home Economics has for its primary function the preparation of individuals to be effective as persons and as family members, able to assume adequately, personal, home and community responsibilities through which family life is sustained. The secondary function of home economics includes preparation for leadership directed toward the primary function, the discovery and extension of knowledge in the field of home economics, and the preparation of professions whose services parallel, supplement or replace activities commonly carried on in the home.[2]

To the extent that the foregoing statements of philosophy are accepted by the staff of the Lady Irwin College, it would seem reasonable to assume that the curriculum in Home Science would be concerned with

a. Helping students develop a wholesome personality.

b. Stimulating students to develop their unique interests and abilities.

c. Creating an awareness of the values of homemaking education through a study of the theory and the practice of the functional aspects of the various fields of Home Science courses.

---

[1] Beulah Coon, "Home Economics in Colleges and Universities of the United States," Bulletin Number 24, Office of Education, Washington, D. C., 1957, p. 5.

[2] Loc. cit.

d. Helping students examine their cultural heritage for the purpose of discovering the basic principles underlying tradition and looking for the same principles in other traditions and societies in order to better understand the inner meaning of human life.

e. Helping students arrive at realistic decisions in regard to perpetuating certain traditions relating to family.

The Present Bachelor of Science Program in Home Science in Lady Irwin College

1. The existing program leading to the Bachelor of Science degree in Lady Irwin College tries to provide experiences which help to develop some basic understandings, skills, applications and interests needed for homemaking.
2. It embraces a body of subject matter dealing with basic subjects for Home Science.

The curriculum stated in the prospectus of Lady Irwin College was as follows:

Bachelor of Science Course in Home Science--1 Year

Qualifying subjects:
- English ☨
- Physics ☨
- Chemistry ☨
- Biology ☨
- Compulsory Hindi (for non-Hindi knowing candidates)

☨A University examination is held at the end of each year in the subjects as indicated ☨ above.

2 Year Bachelor of Science

- Household physics
- Household chemistry
- Diebetics and Biochemistry
- Cookery
- Laundry
- Needlework
- ☛ Housewifery
- ☛ Physiology and Anatomy
- ☛ Hygiene
- ☛ Elements of economics
- ☛ Household biology

3 Year Bachelor of Science

- ☛ Household physics
- ☛ Household chemistry
- ☛ Diebetics and biochemistry
- ☛ Cookery
- ☛ Laundry
- ☛ Needlework
- ☛ Child psychology and parentcraft

Bachelor of Education Course

- ☛ Principles and Practice of Education
- ☛ Psychology and Hygiene of the School Child
- ☛ Present Educational System
- ☛ Methods of Teaching Home Science
- ☛ Physiology and Hygiene and Childhood Education[3]

The Home Science program in the Lady Irwin College as outlined above is comprised of courses in both the sciences and arts related to the home. The Lady Irwin College is one of the few, if not the only Home Science college in India, at the present time, where considerable emphasis is placed on the practical aspects of all functional areas of Home Science.

☛ A University examination is held at the end of each year in the subjects as indicated ☛ above.

[3]Prospectus, Lady Irwin College, New Delhi, India, 1956.

Some of the experiences provided in specific areas of Home Science are described below:

Dietetics and Cookery

The dietetics and cookery courses attempt to bring about an increased understanding of the up-to-date research done in nutrition for health and disease. Planning, selecting, purchasing, preparing, serving, conserving and storing foods are all emphasized in these courses in relation to home conditions.

Hygiene, Health of the Family, Physiology and Anatomy, Home Nursing

The subject matter in these courses, together with their application in the residential hostels and "practicing cottages," helps students to become better acquainted with the public and private facilities offered for the health and welfare in the locality.

Housewifery and "Practicing Cottages"

The program of the Lady Irwin College seeks to help students gain a better understanding of managing a home. The college at present has two "practicing cottages," meant for lower and upper economic group families--and four apartments, suitable for families in industrial cities.

Students, in groups of six, live in these "practice houses" for six weeks without any domestic help. The program advocates

"simple living and high thinking," with an application of the principles of "time and energy." The home appliances are all traditionally Oriental. An electric refrigerator is the only modern facility provided. These six weeks of practical home management help the students gain additional practice not only in planning, selecting, marketing and cooking of wholesome meals within a limited budget, but they also provide opportunities for developing other skills essential for housekeeping and family life.

The students celebrate all festivals--whether it be Muslim, Christian, Parsi or Hindu with the same breadth of acceptance. This serves to establish a fellowship of faith and harbor a deep respect for the different religious beliefs with their concomitant spiritual values.

Needlework or Clothing Construction for the Family

The Lady Irwin College at present places a considerable amount of emphasis on clothing construction. Students construct garments for men, women and children. Many a bride's trousseau consisting of several embroidered saris, personal garments and other articles for the home are wrought with the cunning craft of the needle.

Laundry Work

The laundering and treatment of fabrics are taught in the Lady Irwin College. The institution is acknowledged as one of the best local centers in the town for laundering clothes.

Gardening

The Lady Irwin College provides students with facilities for developing better flower and kitchen gardens and gaining some competence in improving the soil.

Physical Instruction

The college places a considerable amount of emphasis on "health and body beautiful" by fostering games, sports, exercises and Indian dancing--both folk and classical.

Despite the fact that the Lady Irwin College provides many experiences in practical homemaking, it should be pointed out that too little provision is made, as a rule, for the application of subject matter to realistic situations. Many courses in the curriculum continue to be concerned almost altogether with subject matter and each subject tends to be taught in isolation of other subjects.

Methods of Instruction

The present curriculum of the Basic Program in the Lady Irwin College is over-crowded with courses concerned almost altogether with subject matter. Too little provision is made, as a rule, for the application of the subject matter to realistic situations. Each subject tends to be taught in isolation. There is evident need to integrate content from the various areas of professional study, and from certain of the academic fields in dealing with the situations and problems faced by the student and the teacher. As Kent points out:

> Since the purpose of homemaking education is "to prepare for the responsibilities and activities involved in homemaking and in achieving family well-being," and since "learning tends to be more efficient and longer lasting" when it takes place in a real situation, instruction in homemaking education will be effective to the extent that it makes provision for experiences both inside the school and outside it.[4]

The most usual method of instruction in college classes in the Lady Irwin College is by mass lectures, rather than by encouraging the student to find out facts for herself and participating in various types of discussions. Some teachers make fairly effective use of the lecture method, while others merely dictate notes.

A proportionately large percentage of the work of the college is concerned with passing on information or ideas from the teacher to the student. This kind of education is too frequently a one-way street. Perhaps this is one of the most serious difficulties with education in India. It may be said that this type of "study" is overladen with information which lies on the surface of the brain and rapidly passes away because it is not used and because it is not backed up by experience.

The lectures, up to the present time, have been delivered almost altogether in English, and in many cases, students were unable to follow the lectures because of their inadequate command of English.

---

[4] Druzilla Kent, Home, School, and Community Experiences in the Homemaking Program (Washington, D. C.: United States Department of Health, Education and Welfare, Office of Education, 1953), p. 6.

The program of studies, as has been pointed out, provides for basic training in many areas, areas generally agreed upon as essential for students majoring in Home Science. The program as set up now, however, does not offer any electives. The whole program or course of studies is set before the student who must take them in order; it provides no opportunities for individuals to select goals based on their own needs, interests or aptitudes.

CHAPTER III -- PART II

Some Proposals for Strengthening the Bachelor of Science Program in the Lady Irwin College

One of the most urgent problems--if not the most urgent problem--in the Lady Irwin College, is the need for reorienting the program of the graduate studies in such a way that it will help in stimulating a cultural renaissance.

A successful Master of Science or post-graduate program in Home Science will be influenced, to a considerable degree, by the graduate programs upon which it is based. Consideration of the program leading to the Bachelor of Science degree in light of the proposals being made for the Master of Science degree, would indicate the desirability for making some changes in the basic program. It would be well to give serious consideration to some changes in regard to

1. Policies for admitting students to the Bachelor of Science course of studies in the Lady Irwin College.
2. Regrouping of certain subject matter courses in the Bachelor of Science curriculum with emphasis upon student needs and interests.
3. Introducing some subject matter courses in the graduate program not adequately provided for in the present curriculum.

4. Exploring the use of methods of instruction designed to aid:

   a. In the building of sound attitudes, values, etc., in

   b. Developing abilities to (1) think critically and (2) to act effectively.

5. Improving evaluation as a part of the teaching-learning process.

Those changes which seem to be most essential at the present time are discussed below:

1. Admissions

While keeping to the existing rules on "admissions" of candidates to the Graduate School of the Lady Irwin College, the possibility of making some adjustments might be explored. In view of the fact that India needs Home Science teachers in schools, colleges and in the Home Science Wings of the Extension Department (Ministry of Agriculture), a sympathetic consideration of the present admission requirement and the proposed amendment might serve to answer a much desired need.

a. The Existing Conditions for Admission to the Bachelor of Science and Bachelor of Education Courses in Home Science in the Lady Irwin College. According to the Prospectus of the Lady Irwin College, the requirements are stated as follows:

> The minimum qualifications for admission to the 1st year of the B.Sc. Course is the Higher Secondary, Senior Cambridge Intermediate, Qualifying or Admission Examination Certificate of the University of Delhi. Candidates with I.Sc. and B.Sc. qualifications will be considered eligible for admission to the II year of the Degree Course.

> Candidates who possess the minimum qualifications of a Degree in Home Science are eligible for admission to the B. Ed. Course.
>
> Candidates, who have put in one or two years attendance in College, but do not possess the Intermediate Certificate and Candidates who possess the Lady Irwin College Home Science Diploma are eligible to appear [before] the Admission Examination held by the University of Delhi on or about the last week of June. The syllabus of the admission Examination is available at the University of Delhi.[5]

b. Suggested Amendment to Present Admission Requirements of the Bachelor of Science Program in the Lady Irwin College. Citizens of twenty-one years of age and over, who do not possess all of the requirements for admission and who are not candidates for a degree, may be admitted to the College upon giving satisfactory evidence that they are prepared to take advantageously the subjects open to them. These candidates will be required to present to the Directress or Dean of Admissions in advance of their coming, an official detailed statement of their preparatory studies for evaluation and approval. They will also be required to take a scholastic aptitude test under the direction of the Directress of the Lady Irwin College.

It is generally agreed that the philosophy of education should be fundamental in all institutions and therefore coincidental with the aims and purposes of the institution itself. One can say with Smyser that:

---

[5]Prospectus, The Lady Irwin College, 1955-1956, New Delhi, India.

> Admission policies and procedures must be directly concerned with the initial orientation of the student to college life. Such individual problems as the student's fitness for college work in terms of his own abilities and background, whether or not his vocational goals and choices are realistic, the degree of emotional maturity he has achieved, the factors which motivate him as well as the state of his health, must all be considered against his background of the offerings of the college to which he is seeking admission. These factors must be considered prior to the decision as to acceptance or rejection.
>
> But the process is not completed with the acceptance of the applicant. The college also has within the limitations of its resources an obligation to the unsuccessful applicant to guide him into something for which he is better suited. The information upon which rejection is based remains a record of human values, and the college is under moral obligation to make use of it for the student's benefit. Society is the loser if the college fails to discharge its obligation.[6]

2. Regrouping of Certain Subject Matter Courses in the Bachelor of Science (Home Science) Curriculum with Emphasis upon Student Needs and Interests

No program of studies can hold the answer to perfection. Education is defined as a continuous process and educators are becoming increasingly aware of the need for the continuous re-examination and evaluation of any effective educational program. A change in one area or at one level of an education program may well create the need for a change in other areas or at other levels.

---

[6] W. C. Smyser, "Admission Policy and Student Counseling," Current Trends in Higher Education (Department of Higher Education, National Education Association of the United States of America, 1948), p. 48.

As has been stated previously, adding the Master of Science to the Graduate School of the Lady Irwin College makes it advisable to re-examine the program of the Bachelor of Science upon which it is based, with a view to creating a broader, sounder foundation.

With this end in view, the following suggestions for a reorganization of the functional subject matter areas were presented here. The writer is aware that a mere reshuffling will produce no magic transformation. The suggested regrouping of subjects was only an attempt towards helping every Home Science student of the Lady Irwin College to a richer personal life which may make it possible for her to contribute more fully to group living in families and in communities. A national system of Home Science education for India must, therefore, take full account of the genius and civilization of the people and the environment which influences them just as surely as the inborn capacities.

The Lady Irwin College, at present, as already indicated, offers the following graduate courses:

1. A three-year Bachelor of Science course in Home Science.
2. A one-year Bachelor of Education course for preparing teachers in Home Science Education.

Both affiliated to the University of Delhi

These existing courses of studies as mentioned before are uniform for all students. In view of the growing demand for women trained to assume a wider variety of responsibilities in the area

of Home Science, a more varied and flexible curriculum may seem desirable. Tyler appropriately remarks:

> The instructional program actually operates in terms of the learning experiences which the students have. Unless the objectives are clearly understood by each teacher, unless he is familiar with the kinds of learning experiences that can be used to attain these objectives, and unless he is able to guide the activities of the students so that they will get these experiences the educational program will not be an effective instrument for promoting the aims of the school. Hence, every teacher needs to participate in curriculum planning at least to the extent of gaining an adequate understanding of these ends and means.[7]

Suggested Regrouping of Subjects

The following proposals are suggested for consideration in order to increase the effectiveness of the existing program.

Core Curriculum for the First Two Years of the Bachelor of Science (Lower Division)

1. That the core curriculum or broad basic course of studies as required at present of all students for the first two years of the Bachelor of Science be re-examined for the purpose of increasing its effectiveness.

First Year

2. The "core" curriculum of the first year Bachelor of Science would not require much change. Two courses now offered during the

---

[7]Ralph W. Tyler, Basic Principals of Curriculum and Instruction (Chicago: The University of Chicago Press, 1950), p. 82.

second year Bachelor of Science--Elements of Economics and Physiology and Anatomy--might be transferred to the First Year Bachelor of Science class.

It is suggested, too, that the possibility of expanding the courses in Hindi and English to include elements of Journalism be explored.

Second Year

3. The curriculum for the second year, like that of the first, would not require any drastic changes. The science requirements, for example, could remain as at present, as would Foods and Cookery, Clothing Construction, Household Biology and Hygiene.

4. It is suggested that the possibility of offering the course for Textiles and Laundry work in one year instead of in two, as at present, be considered.

5. It is suggested, too, that the possibility for expanding the course in Housewifery to include problems of "art related to the home," together with problems relating to good "family relationships," and child development be considered.

Regrouping courses already in existence would doubtless provide for considerable improvement but reference to the purposes of Home Science Education as they have been expressed by various groups reveals certain gaps in the courses provided at the present time. In order to strengthen the program, the addition of a number of courses might be considered.

Suggestions in regard to some courses and experiences which might be added to the present program are as follows:

Art Related to the Home

Related art needs to be incorporated into the framework of studies of the Lady Irwin College. India, from time immemorial, has been the home of cottage industries. Art, in India, was a common heritage of the people, not a monopoly of the few. The cottage crafts were, and still are, the most important media of art. Sir George Birdwood, one of the first interpreters of Indian crafts to the West, graphically wrote:

> The hereditary artisans of India, by the mere touch of their fingers, trained for three thousand years to the same manipulations . . . transform whatever foreign work is placed in their hands into something rich and strange and characteristically Indian. . . .
>
> In India everything is hand wrought, and everything down to the cheapest toy or earthen vessel, is therefore more or less a work of art. The spirit of fine art is indeed everywhere latent in India, but it has yet to be quickened into creative operation. The Indian workmen, from the humblest potter to the most cunning embroiderer in blue and purple and scarlet is not less the true artist, although he seldom rises above the traditions of his art. . . .[8]

The present government of India is encouraging small scale industries and handicrafts. The Basic Scheme of Education is promoting crafts and following up their watchword--"Hands before Books." India

---

[8]Sir George C. M. Birdwood, The Industrial Arts of India (London: Chapman and Hall, Limited, 1880), pp. 129-134.

needs to link up old traditional patterns into "new shapes" of utilitarian articles. This is a sure way of supplementing the low income of the common man.

Related art is now taught in the "extra curricular" classes of the Lady Irwin College. "Art in the home"--with an inclusion of music and dance and other allied arts might be set up as one of the main subjects for a major course of study in the regular Home Science program.

Emphasizing the need for art for the "Future of Education in India," Arundale rightly said:

> Art has to be imbibed and beauty must be breathed into one's being. . . . The teacher of art . . . is an ambassador from the soul to the body. . . .
> The college should provide for real learning including music, architecture, philosophy, literature, etc. At present college education is just a means to Government service--the main part of the study should be for their [students] life's work with additional cultural subjects.[9]

Home Demonstration in the Lady Irwin College as a Branch of the Extension Program in India

The introduction of Home Science wings into the Directorate of Extension of the Central Ministry of Food and Agriculture is a new venture. The Lady Irwin College, ever since the inception of these

---

[9]Rukmini Devi Arundale, The Future of Education in India (New Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India, 1954), pp. 66-68.

Home Science wings, has offered orientation courses to its chief and assistant instructoresses. Today, the clarion call for a united national scheme of education has been sounded. All forces in India must join hands in building up the national education scheme.

> There is a strongly felt need for properly trained women workers to approach village homes and to cater to the needs of village women. Women, knowing the skills and improved practices of homemaking, are indispensible for any program aimed towards better living in the villages. The home being the nucleus of the community, should be the first place to be reached by the village workers.[10]

Devadas stressed the importance of providing training for Extension workers when she said:

> Home Science is education for home living, the Extension training program in Home Science will naturally take into consideration all the aspects of living--food--clothing--. . . human relationships . . . with the scientific information and practical applications carried to the homes of India through the Home Science Extension program, the wives and homemakers can make more effective contributions towards building a stronger India, by providing more amenities for the well-being of the family, specially the children who are the future citizens of the country.[11]

Child Development

The present program of the college deals very inadequately with problems in child care and training. The student should

---

[10] S. C. Roy, Curriculum for Extension Home Science, Gram Sevikas (New Delhi: Government of India, 1956), p. 2.

[11] Rajammal P. Devadas, Curriculum-Extension Home Science, Gram Sevikas (New Delhi: Government of India), p. 5.

have as well-rounded and thorough a knowledge of children as possible. This is basic to the general education which helps the student in teaching children, in becoming an effective homemaker and an active citizen.

Today, Nursery School education is in its initial beginnings in India. There is a dire necessity to provide instruction in this area to make the goals of teacher education more effective.

Dr. Wright's remarks in this connection are particularly significant:

> The second emphasis, within the present courses of study in Home Science, i.e., in those institutions where degree and diplomas are given in this field, should be on courses in Child Development. Again, we can expect the traditional educator to oppose collegiate recognition of this subject in the oft-expressed attitude that bringing up children is common knowledge and not worthy of inclusion. Women students of college age the world over, with trained minds and keenly alert to scientific advances, are similar in a demand for facts, for data which are based on investigation, not tradition. Better teachers and better mothers will eventuate, not only among the students in the courses but also among those not enrolled but affected by such courses. Parent education, a popular feature of adult educational planning in backward areas in the United States, has long been accepted as an effective means, for instance, of promoting better health for children and families. One of the studies now under way in one of our universities is as to the effects of differential rearing of boys and girls, for, knowing that there is often favoured treatment for boys, we should understand what the psychological and sociological effects are on other persons in the family in the school. Better homes, better schools, better citizens--uncontroversially all aims of all educations--will be the demonstrated results of the richer courses in Child Development.[12]

---

[12]Home Science Association of India, September 1954, op. cit., p. 31.

The present "Nursery Center" established recently at the Lady Irwin College--more for the care of children--might well serve as a basis for a laboratory for the application of methods in child development. It could help to provide experiences essential for teacher training.

Family Relationships

Family relationships is another of the missing links in the existing chain of the Home Science program of the Lady Irwin College.

One of the major strengths in Home Economics in America is that courses in "Family Relationships" not only afford an opportunity to prepare students for marriage and family living but also make possible preparation for remunerative work in closely allied fields, such as Child Development, Parent Education, Family-Counseling, College and Extension Teaching and Research.

There is a desperate need for the young people in India to secure a better understanding of themselves, and preparation for marriage by stressing down-to-earth methods towards better family living. Nearly all marriages in India, even today, are arranged by parents. The popular conception is that arranged marriages have helped to build stable marriages in India. Whatever may be their advantages, none can deny that arranged marriages bring in their wake moments of uncertainty, doubt, stress and strain--both for the parents and the young people.

Many young people in India today, seem to be eager for information which would enable them to make more satisfactory adjustments to marriage. They need to learn more about some of the ever-common matters relating to married life which most Indian parents refrain, through shyness, from enlightening their children.

Every parent in India hopes for the ideal that has been unconsciously inculcated in him from his forefathers in the parable of the Mahabharata. The Mahabarata, which exerts a strong influence on Hindu life, said:

> A wife is half the man, his truest friend,
> A loving wife is a perpetual spring
> Of virtue, pleasure, wealth; A faithful wife
> Is his best aid in seeking heavenly bliss;
> A sweetly speaking wife is a companion
> In solitude, a father in advice,
> A mother in all seasons of distress
> A Rest in passing through Life's wilderness.[13]

The strength of a nation depends on its families. The family is the cell of the social body. It is the "axis" round which the earth revolves. A course in family relationships can help young people with practical suggestions for future patterns for democratic living in the home. One can say with Beasley that it will serve to give youth suggestions and:

---

[13]Abhedanda Swami, India and Her People (New York: Published by the Vedanta Society, 1906), p. 11.

> . . . something of the practical help they may need in making their home-life satisfying, spontaneous, and productive, to the end that their members may each achieve his inalienable right to life, love, and the pursuit of happiness.[14]

Journalism

Journalism might well be included as a course to round off all subject matter areas in Home Science in the Lady Irwin College and help make the program more effective. Writing Home Science material for homemakers to read and use does not require a special talent, but a thorough understanding of the type of writing which will help people gain a better understanding of the various spheres of Home Science is important for all workers in this area. Home Science literature is a channel which can be used to communicate clearly and effectively to the people not only better homemaking ideas but also the results of research in Home Science. Through effective literature a creative curiosity and an enduring desire for developing new ideas, facts and new applications of existing knowledge may be raised, which will help to contribute to the happiness and well-being of the nation.

It would seem most appropriate for a course in journalism to be incorporated into the "core curriculum" as a part of English or Hindi writing.

---

[14] Christine Beasley, Democracy in the Home (New York: Association Press, 1954), p. 2.

The Third or Final Year of Specialization of the Bachelor of Science (Upper Division)

The third year may be termed the year of specialization. The program of studies of the third or the final year might be so grouped as to offer three parallel group electives, to enable the student to select a group for specialization towards any one of the careers stated above. For the sake of convenience these group electives might be identified as Programs I, II and III. Table II gives the proposed regrouping of the subjects.

A resume of the above "suggestive design" for specialization for the third and final year of the Bachelor of Science indicates the following:

1. The functional subject matter of the areas of household science in the third year would remain substantially the same as at present.
2. Program I would be designed to offer a broader knowledge of Home Science than at present by expanding the course in Home Management to include Child Development, Human Relationships and Art in the Home.
3. Program II would be designed to place greater emphasis upon Textiles and Clothing Construction, with Advanced Textile Chemistry as a major. It is suggested, too, that the possibility for expanding the course to include Human Relationships and Art in the Home be explored. It is

TABLE II

PROPOSALS FOR REGROUPING SUBJECTS INCLUDED IN THE THIRD YEAR OF THE BACHELOR OF SCIENCE PROGRAM OF THE LADY IRWIN COLLEGE

Program I	Program II	Program III
1. Household Science (Physics and Chemistry)	1. Household Science (Physics and Chemistry)	1. Household Science (Physics and Chemistry)
2. Home Management with a. Child Development b. Human Relationships c. Art in the Home	2. Textiles and Clothing Construction (Major) with a. Advanced Textile Chemistry b. Human Relationships c. Art in the Home	2. Foods and Biochemistry (Major) with a. Community Nutrition b. Human Relationships c. Art in the Home
3. Textiles and Clothing Construction	3. Foods and Nutrition (Minor)	3. Textiles and Clothing Construction (Minor)
4. Foods and Nutrition		

further suggested that instead of the functional subject matter area of Home Management, a minor in Foods and Nutrition be offered in connection with Textiles and Clothing.

4. Program III be adapted to offer Foods and Biochemistry as a major. It is suggested, too, that the possibility for expanding the course to include Human Relationships and Art in the Home be explored. It is further suggested that instead of the functional subject matter area of Home Management, a minor in Textiles and Clothing be offered.

This "suggestive design" is shown in Figure 1

These suggestions would be in keeping with the development of a plan for preparing young women for work in those areas which would seem to be in greatest need of trained workers at the present time.

1. General workers in Home Science such as teaching of Home Science and Extension work.
2. Specialists in Textiles and Clothing Construction.
3. Specialists in Foods and Nutrition.

The Present Library in the Lady Irwin College

The importance of libraries as a potent force in colleges cannot be over-stressed. President Truman's Commission on Higher Education said, "The Library is second only to the instructional staff in its importance for high quality instruction and research."

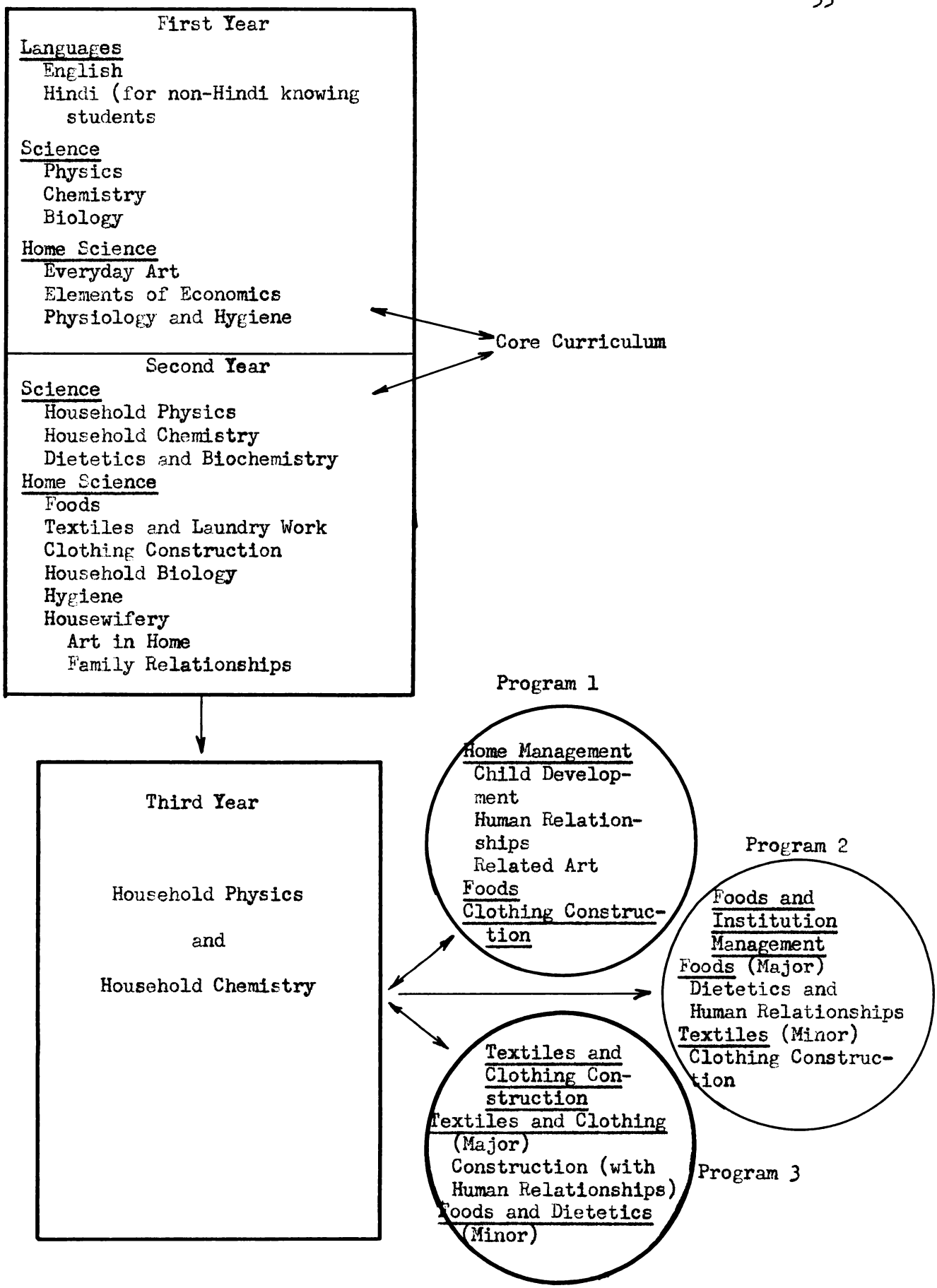

Figure 1. Bachelor of Science (Home Science)--Proposed Regrouping of Courses for First, Second, and Third Year Classes.

The library in Lady Irwin College is still in the stage of infancy and is most inadequate. The librarian--if she may be called one--is still the custodian of the few books available in the library. Books on Home Science are still maintained primarily to serve the members of the faculty and only incidentally the students. The students are not allowed open access to the stacks and hence books do not serve their demands.

There are no departmental libraries. The teachers do not have good libraries of their own as they cannot afford to buy books or subscribe for journals to keep themselves abreast of the times.

There is a vital need for a scholarly and specialized library to help in the advancement of learning and coordinate the work of the college library with that of other university libraries. A carefully selected collection of books, periodicals, manuscripts, and up-to-date research literature, with better organization and the open access system, can help immeasurably to serve the needs of the students.

The Existing System of Examinations in the Lady Irwin College

The Lady Irwin College is perhaps one of the very few Home Science colleges in India where considerable emphasis is placed on the practical aspect of the subject in Home Science. But there can be little doubt that the present curriculum is dominated by the annual university examinations. The hallmark of attainment is the essay type

of paper and pencil test--testing more the memory of the individual than his ability to apply knowledge. Most of the students are fatigued at the end of the long drawn out examination period and hardly have the capacity for clear thinking. As has been pointed out already, the whole system of education in India is examination-ridden at the present time, causing undue stress and strain and undermining the health of the student.

Writing on examinations in India, the Secondary Education Commission wrote:

> The examinations determine not only the contents of education but also the methods of teaching--in fact the entire approach to education. They have pervaded the entire atmosphere of school life that they have become the main motivating force for all effort on the part of the pupil as well as the teacher. . . . A pupil's effort through his education is concentrated almost wholly on how to get through the examination. Unless a subject is included in the examination scheme a pupil is not interested in it. If any school activity is not related directly or indirectly to the examination it fails to evoke or enlist his enthusiasm. As regards methods, he is interested only in those which secure an easy pass rather than in those which may be educationally more sound but which do not directly concern themselves with examinations. He is more interested in notes and cribs than in textbooks and original works; he goes in for cramming rather than for intelligent understanding since this will help him to pass the examination on which depends his future. . . .
>
> . . . Not only the pupil but the teacher also is affected by this examination craze. To the teacher the system of examination affords an easy solution to many of his problems. While it is difficult, if not impossible, to show immediate, tangible, measurable results with regard to those intangible effects of a good education such as character training, a well-rounded personality, a wholesome social adjustment and a proper development of appreciation of the finer values in life, it is much easier to show results in intellectual attainments and academic progress.

> And if society sets greater store on these attainments than on what is conducive to character building and sound citizenship, how can a teacher help paying attention to the former attainments. . . .
>
> The attitude of parents also tends to support this state of affairs. Because of the close connection between employment and the passing of external examinations the average parent is more interested in his child passing that examination than in anything else. . . . Thus all circumstances conspire today to put an undue and unnatural emphasis on examinations. . . . and they have come to exercise a restricting influence over the entire field of Indian education to such an extent as almost to nullify its real purpose. . . .
>
> . . . Examinations today dictate the curriculum instead of following it. . . . Pupils assess education in terms of success in examinations. . . . Teachers, recognising the importance of the external examination to the individual pupil, are constrained to relate their teaching to an examination which can test only a narrow field of the pupil's interest and capacities and so inevitably neglect the qualities which are more important though less tangible.[15]

The twentieth century has witnessed a widening of the meaning and scope of education. Education connotes a continuous growth--an all-round development of the student's personality. If examinations are to be of real value they must take into consideration an evaluation for the all-round effectiveness of an educational experience.

Writing on the magnitude of the problem of examination and suggesting recommendations for its reform the University Education Commission reports:

---

[15] Report of the Secondary Education Commission, October 1952-July 1953 (Delhi: Government of India, Ministry of Education, 1953), pp. 144-147.

> We recommend that a set of objective tests for guidance and for evaluating classroom progress should also be developed immediately . . . the tests in the United States which would supply models represent over thirty years of work and scientific experimentation, the expenditure of millions of dollars and wide application in many fields.[16]

Evaluation as defined and practised in American education does not exist in India.

Examinations have created barriers between teachers and students and have imposed a most difficult task on the teacher who has to assume the dual role of counsellor and disciplinarian.

Moreover, very little credit is at present given for class work in courses except sometimes in the case of practical work. The Lady Irwin College allots 20 per cent of the marks for such work. The University Education Commission recommends that

> . . . one third of the marks allotted to each subject be reserved for work done during the course of instruction and that this be adopted forthwith in the teaching universities for B.A., and B.Sc., M.A., and M.Sc. examination.[17]

Guidance

The Lady Irwin College needs to make provision for an adequate guidance program, so as to enable the student to secure more effective results from her university work.

---

[16] Ibid., p. 339.

[17] The Report of the University Education Commission, op. cit., p. 341.

No two leaves of a tree are alike. Likewise, no two individuals. Each individual has his own secret law of growth and has a unique personality. It follows, of course, that uniform programs and uniform methods of instruction applied simultaneously to a large number of students may be injurious. It is in the interest of society as well as for the individual that every student's peculiar gifts and powers should be developed and raised in the highest.

Desai, stressing the need for guidance in Indian colleges, says:

> The guidance program is going to be the most significant as well as the most difficult program in India. It is practically nil today in the educational program, since the entire enrollment is headed for higher education, and since the caste system and joint family take care of vocational choices. There is virtually no problem of selection when most of the sons follow the father's occupation. But for the future, with the rapid increase of industrialization and acceptance of the principles of individual differences in aptitudes and interests the junior colleges will have to provide extensive guidance programs.[18]

Student guidance is an integral part of good teaching and is, therefore, properly the concern of each faculty member.

As Tagore says: "A nation grows in beauty and strength by the value it places on each individual."

---

[18]Lalitha Manibhai Desai, "Proposals for the Development of Education in India, Derived from a Synthesis of Occidental and Oriental Sources" (Unpublished Ph.D. thesis, University of Michigan, Ann Arbor, May 1948), p. 228.

Both the interest of the individual and a democratic society demand that every individual's peculiar gift and powers should be developed for an ever richer and continuous growth. This necessitates guidance, and effective guidance cannot be given without a trained staff. There is obvious need in India for counselling and guidance of students. Hardly any university--or perhaps none--has a professionally trained counselling staff.

The Lady Irwin College with a dearth of trained staff will not be in a position to carry out this goal for several years to come. Hence it is imperative that each teacher should perform this function through day-to-day contacts, thus providing a basis for discovering the students' abilities and aptitudes and "establishing rapport."

The President's Commission on Higher Education in America, stressing the value of counselling, stated:

> In diversifying its means and programs to meet the range of interests and abilities of an enlarging student body, the college necessarily assumes the obligation of providing the individual student with skilled and informed guidance in selecting from a variety of college offerings those best suited to his purposes and aptitudes. Unless guidance of this sort is provided, the entire point of the diversification of means will be lost. . . .
>
> . . . Counselling can lead the student to see the relevance of general education to his vocational goal and to build a program that combines general and vocational education in appropriate measure.[19]

---

[19] Higher Education for American Democracy, op. cit., p. 66.

Ideally "guidance" may, perhaps, be used in a much wider sense of the term. Through guidance the teacher may awaken

> The intelligence of each individual that will enable him to discover the meaning of his individual existence, and therefore the real purpose of his being . . . that self knowledge in the pursuit of truth. . . .
>
> Education must find a new way of life, a new therapy of regeneration. Neurosis is the manifestation of frustration, the meaninglessness of life. . . .
>
> The gaining of self-knowledge is a process of watching with scientific detachment our own responses to the constant challenge of life. . . . Such objectivity in self-observation demands great honesty and humility. . . .
>
> Self-knowledge reveals to us what we are and what we have to do to be completely happy. . . . With our growing insight into the nature of ourselves, we gain the power of looking into the heart of another and see the secret patterns that are being woven in the lives of others. It is insight, understanding, sensitivity, Love, call it by what name we like. To enable another to see for himself the pattern of his living, the law of his own growth, is to restore the integrity of his being. Like the health of the body it is indivisible, it is the collective achievement of every little cell and organ.
>
> Self-knowledge brings us peace, happiness, the wisdom and insight that enables us to look into the lives of others and restore meaning to them. . . . The techniques of self-knowledge cannot be taught. Awareness is not a mechanical process. Love, wisdom, understanding cannot be a part of the curriculum. We can teach the Bible, but not the love of Christ. We can teach the Gita, but not the wisdom of the Supreme Teacher of Yoga. Though it cannot be taught, it can be communicated, not through speech, but through being. In education what we are is infinitely more important than what we say or do, than all planned teaching, all formal instruction. But there are methods of communication which are subtler and more effective than speech. It is communication through being.
>
> Truth, Perception of Beauty, Love, all the values of the spirit can only be transmitted through what we are. . . . The teaching of self-knowledge cannot be separated from instruction. It is something more than knowledge. It is itself invisible, hidden, but invests the most trivial, the most insignificant, with the radiance of eternity. . . . Such seekers of inner freedom will help in this great task of the regeneration of man, build up schools, the laboratories where experiments in a new way of living may be

carried on. It is on these teachers and these schools that our future will depend. . . .

Truth is not the new, but the ever new. Education is the process of making all things new. Religion in its most comprehensive sense.[20]

---

[20]B. Sanjiva Rao, The Future of Education in India (Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India, 1954), pp. 79-85.

CHAPTER III -- PART III

Exploring the Use of Methods of Instruction Designed to Aid Those Preparing for the Profession of Teaching (Bachelor of Education) in the Lady Irwin College

Educationists in India seem to hold that professional training in teacher education should be deferred to the end of the graduate course. The Bachelor of Education in the Lady Irwin College is, therefore, offered after the completion of the Bachelor of Science program of studies.

The basis for this view may be traced to the general ideas that:

1. College students are in a better position to choose a vocation after they have had a broad basic educational experience.
2. Professional education has more value for mature students; it has more practical value and is perhaps more effective when it comes close to the beginning of a professional career.

These ideas seem to be back of the reasons for offering the Bachelor of Education or teacher education program during the fourth year of the graduate school program in the Lady Irwin College.

No fundamental changes are proposed in the general over-all scheme of the Bachelor of Education curriculum. However, it is felt that a better understanding and appreciation of some of the newer

developments resulting from research in regard to the learning process could make a substantial improvement to college instruction. The conviction in India, as said before, has been and generally still is, that if a professor knows his subject adequately he can teach; if he teaches, students will learn. Very little consideration, if any, is given to the individual student in the building of college courses; the needs, interests, motivations and specific skills of students are sometimes lightly dismissed or completely ignored.

A change from reliance on tradition and subjective judgment as a basis for educational procedures, to concern for scientific research and the application of scientific methods and scientific findings should be emphasized in college teaching.

According to Bostwick:

> Much of the turbulence in education today results from new theories of learning. The curriculum must provide activities and experiences which are significant and useful in the on-going process of living. The core curriculum approach, the effort to design learning experiences from the point of view of social functions, and the exploration of individual and group needs as a basis for curriculum modification--all stem from new concepts of learning. . . .
>
> Learning is experienced as insight and as a group of relationships between parts and whole, ends and means, acts and their consequences. Problem solving has become one of the chief means of education.[21]

The growing science of education is placing greater emphasis upon the analysis of instructional materials and the exploration of

---

[21] Prudence Bostwick and others, One Hundred Years of Curriculum Improvement, 1857-1957 (Washington, D. C.: National Educational Association, 1957), p. 3.

newer methods of working in groups. These have brought insights which are changing curriculum design and making possible more profitable relationships among teacher, pupil, parent and citizen groups. The "old order" of habit formation and repetitive drill "have yielded place" to new methods, which recognize the learner as an active, growing organism who responds as a whole to the experience of living.

Present Trends in College Teaching and Teacher Education

The focus is on the student. Knowing about the student is the first step in developing effective teaching. This knowledge is used to guide learning experiences.

Cottrel says:

> The psychological basis of learning makes the student central in the teacher-learning process. Only as the college teacher continues to study his students in order to understand their thinking and feeling, their needs and concerns, can he provide with any degree of assurance the kinds of experiences which have meaning for them and through which they can be helped to achieve needed learnings.
>
> The first plan is developing as far as the abilities of the student permit him, with guidance, to recognize his needs and to visualize the activities in which he will engage as a citizen teacher. As new problems and new areas of investigation are seen, replanning is necessary. Plans are also modified in the light of the student's growth.[22]

The college student--like all learners--is learning what he is experiencing. He is motivated by drives and goals which he recognizes as significant and which he should share with the teacher in determining specific experiences to undertake.

---

[22]Donald P. Cottrel, Teacher Education for a Free People (New York: The American Association of Colleges for Teacher Education, 1956), pp. 275-278.

Bostwick, in this connection, writes:

> Education must relate to the life of the learner, serve a real purpose in his development in ways in which he himself can share in shaping, and equip him with insights which he can use in the management of his experience.[23]

Clarification of course objectives. Clarification of objectives is another essential step in the improvement of college teaching. This clarification must be conducted in such a way that it gives each faculty member a chance to state his own objectives for teaching and include his ideas in the general thinking of the university.

The relation of any one course to the over-all purpose of the curriculum should be understood by both students and teacher. Students should be aware of the relationship between their goals on the one hand and the objectives of learning experiences comprising a course on the other.

Cottrel remarks:

> When the goal is . . . to help students to learn how to use their college education for the rest of their lives, and to enjoy life more because of what we have been able to teach them, the role of the college teacher becomes that of a guide stimulating and helping the student to relate, to interpret critically, and in terms of his needs and goals to use knowledge as an instrument of social usefulness. Teaching then becomes the process of guiding learning. The focus is on what is happening to the student--what he is learning, and whatever he is learning with efficiency and economy.
>
> So conceived, teaching becomes much more than telling. The teacher, as guide, has various responsibilities, such as:

---

[23] Bostwick, op. cit., p. 4.

1. Helping students identify needs and problems
2. Developing new interests and concern for new needs and areas of work.
3. Making available resources for learning and guiding the use of them.
4. Making available and guiding experiences for learning, including
   a. Identification of common purposes
   b. Co-operative planning of experiences
   c. Providing for individual differences
   d. Using procedures appropriate to the situation (the students and the goals to be achieved)
   e. Helping students relate their experiences
   f. Helping students arrive at sound generalisations.
5. Providing opportunity to use what is learned
6. Helping students evaluate their growth
7. Helping students understand the nature of the learning process as it relates to themselves and others.[24]

Furthermore, as stated before, there is the need for student participation not only in planning but also in carrying out experiences designed for meeting their individual differences, abilities and interests.

Co-operative planning with students.

> Co-operative planning with students of course work and other activities is an important aspect of college teaching which focuses on the student. Only as the student shares in planning his activities can he reveal to the college teacher what he really thinks and feels--his concerns and purposes, and the meaning which situations and ideas have for him. . . . Work which is in line with the learner's purposes and which has meaning for him is that in which motivation is strong, effort is vigorous and from which functional learning results.[25]

---

[24] Cottrel, op. cit., pp. 273-74.

[25] Ibid., pp. 284-85.

The effectiveness of guidance depends to a considerable degree on how carefully the possibilities and alternatives have been thought through by the college teacher before undertaking co-operative planning with students.

Some units of work may need planning over a stretch of several weeks or months of work, while others may relate to the work of a single day within a large block of experiences. Co-operative planning provides opportunity for guidance which helps students to appraise progress and to foresee the needs of the day which must be planned to meet them.

> The concept of co-operative planning must at no time permit a "pooling of ignorance." In areas largely explored by the students, co-operative planning may begin after an initial experience in which the college teacher presents and raises questions about one or more situations which have meaning for the students and are within the scope of their background. In areas related to their concerns but for which they have little background, first steps in co-operative planning may be limited to recognizing the need for and making proposals for extensive reading. However, provision is made at any point in class discussion for student reactions and proposals.[26]

Providing for individual differences. Meeting the different needs of individuals within a student body is one of the great challenges to every teacher. It is a field in which experimental study is needed.

> Students should be stimulated to put the best of themselves into the learning situation and to feel responsible for getting what they want and need from it. They should

---

[26] Ibid., p. 286.

> be assured of the teacher's willingness to help them either directly or by referral to other sources of help. . . .[27]

The current study of methodology demonstrates that

1. how we learn is as important as what we learn,
2. more important than specific procedures are the aspects of emotional climate. The teaching procedure should be selected in relation to the learning desired.

Some of the other qualities that characterize an effective teaching-learning situation are:

1. knowing and respecting each student as an individual,
2. recognizing his need to be understood by providing him opportunity to question,
3. insuring that his errors be turned into learning opportunities,
4. gaining a better understanding of the psychological-sociological concepts of developmental tasks,
5. promoting a better understanding of new relationships among school, home and community.

Bostwick and other educationists maintain that: "Research relating to how we learn and how changes in human behavior can be affected has revolutionized both teaching methods and materials of instruction."

---

[27] Ibid., p. 81.

Some of the common current teaching methods in Home Economics in America include the lecture, discussion, individual and group reporting, using resource persons in varied ways, testing and evaluation, conferences, written assignments, individual and group study, direct experiences, the use of audio-visual materials and environmental factors, observation of good teaching situations, directed reading, field trips and many variations within each of these ways of working.

Writing on the factors that determine the choice of a method to be used in a learning situation, Cottrel asserted:

> No method *per se* can be thought of as being effective or non-effective in guiding learning. No method should be used solely because it is traditional or because it is new. Creative teaching requires imagination and the development of new ways of meeting new needs through selecting methods most conducive to growth. The real test is the effect of a method on students.
>
> . . . More important than specific procedures are . . . the learner's involvement, and the teacher's enthusiasm for the work at hand. Back of these factors are the basic psychological principles governing the learning process--the significance of purpose and meaning, of active involvement, of security and belongingness, of generalizing and applying learnings to varied situations. . . .
>
> Further the teacher should share ideas honestly and be willing to say, "I don't know," . . . that he be able to control conflict situations through recognizing opposing values and providing opportunity to explore the conflicts; that he respect changes in position based on added study and new data; and that he be consistent with his own behavior with students.
>
> Likewise, through the use of varied methods, it is the responsibility of the college teacher to help the student clarify his thinking and develop a scholarship characterised by critical insight. The teacher's role may embrace identifying inconsistency, questioning assumptions, adding meaning through illustrations or by application of ideas to practical situations, raising questions of value . . . making comparisons to sharpen similarities and differences,

questioning to focus on consequences or new areas of needed inquiry, assisting in the formulation of propositions and generalizations.[28]

Teaching Procedures

Teaching procedures are generally selected by the teacher in relation to the learning desired. Some of the methods used in group learning in America today are briefly discussed below.

1. The lecture method. The lecture is one of the many non-laboratory procedures of teaching that may be used at the college level. It is often referred to as the method which tends to place the learner in a passive role--a role not conducive to learning. However, it may have a legitimate place in the curriculum in relation to some purposes, for example, the lecture can enable an instructor to:

a. introduce general, over-all material to a group in order to set the stage for a series of learning experiences,

b. summarize at intervals, the work under way in various groups,

c. plot next steps.

Research indicates that the value of attempts to develop an entire course through the sole use of the lecture method may be questionable.

---

[28] Ibid., pp. 289-291.

2. Group discussion procedures. Students play a more active part in the learning process when they participate in group discussions. Discussion tends to promote intellectual growth. The three major conditions contributing to more effective learning on the part of the student when participation in discussions are:

a. Reasonable preparation or background on the part of the student.

b. Concern with the problem under discussion.

c. Skillful leadership and guidance towards a more fruitful discussion on the part of the instruction.

3. The planned group interview.

> A particular form of discussion in which a specialist meets with a group for the purpose of exchanging ideas on carefully planned questions, usually sent to the specialist in advance . . . the procedure is similar to that of a group conference.
>
> It enables the students to share ideas with a specialist and to experience group problem solving with a person of superior competence. A useful variation of this need is the panel of individuals having different backgrounds, knowledge, and skills.[29]

4. Laboratory experiences. The laboratory situation in Home Economics offers unusual opportunities for good teaching. Learning comes as a result of the active participation of the learner. The laboratory, which makes possible a wide range of learning experiences, can contribute to growth on the part of the student.

---

[29] Ibid., p. 292.

> Its informality brings students and teachers together. . . . It offers an opportunity for flexibility.
> Improvement in ways of working may be observed while the job is being done. . . .
> Laboratory teaching challenges a teacher to make Home Economics function. Success in laboratory work adds to her prestige with students. . . .
> Increasing student independence within the framework of the goals of a course should be an important area of all laboratory courses.[30]

The one situation to be guarded against is the teacher-dictated laboratory situation, or one in which all students carry out identical activities, regardless of interest, need or previous experience.

5. Field trips. Field experience is another teaching technique which has been found useful in Home Economics, which may involve the student in such activities as making surveys, working in field situations and participating in social action. Direct experience is an important factor in learning but it must be meaningful to the student. This method is in strong contrast to the book and room-bound methods of instruction practiced a few years ago. Young people today should be encouraged to move out of the confines of the school to observe and participate in the life of the community. It is like the method so well advocated by Mahatma Gandhi in Basic Education.

The field trip should arouse the curiosity of the student, strengthen his initiative and result in action. It should lead to personal growth, to further study and experiences.

---

[30] Wright, op. cit., pp. 81-83.

Branegan says:

> Field experiences to see how people work and to see methods of production and distribution are common procedures in home economics. Internships and apprenticeships are considered essential aspects of professional training for most home economics positions today. Such experiences are good to the extent that they give students the help they need when they need it, and are carefully supervised in terms of the long-term objectives of the curriculum.[31]

6. Teaching aids. A wide variety of materials helpful in teaching Home Science may be available; included may be the physical facilities of the department and campus, community resources, as well as other aids such as pictures, tape-recorders, film strips, movies, television, etc.

Printed materials--books, bulletins, magazines and newspaper articles--are of special value in teaching Home Science. College students should learn how to judge and make better use of printed materials. This is particularly true of those who plan to become homemakers or to train future homemakers, because of the many changes taking place in society which affect home and family living. Homemakers who form the habit while studying homemaking of consulting newly developed materials relating to the many aspects of their job and continue the habit when they become homemakers, can be expected to do a better job than the homemaker who is guided almost altogether by tradition.

---

[31] Ibid., p. 84.

One could write at length on the various devices for the improvement of teaching. The great importance, however, lies in the choice of effective techniques suitable under the proper conditions to be used singly or in combinations. Method is but a means to an end. Method is to be valued only as it contributes to a learning experience which is based upon recognized principles of learning. The turn of this century has seen tremendous changes in the methodology of teaching practices. There is no denying that educationists have striven to promote the ideals of education for freedom. School and college personnel are beginning to rely upon cooperatively produced "Resource Units" as a basis of instruction rather than upon an adopted text. What was once a textbook is becoming a reference book.

7. Lay participation.

> Most recent is the movement to include parents and other citizens of the community in curriculum building. . . . Public opinion polls are being used to help discover what the members of the community want their schools to do for their children. In these ways schools work with home and community as a partner in the education of children and youth.[32]

Writing on facing the future, Cottrel remarks,

> Every school is potentially a laboratory for its teachers. The education of the teacher is never truly complete. . . .
> Teacher education requires far more than a systematic pre-service instructional program in college; it hinges upon a complementary community situation in which the teacher may participate as a learner, as a theorist of

---

[32] Bostwick, op. cit., p. 7.

> education in the making, and as a scientific student of the educational aspect of human affairs.[33]

Findings from recent research resulting from the creative participation of many individuals will change present practices to meet new situations. Education cannot stand still.

8. Evaluation in the teaching-learning process. Teaching, learning and evaluation are now considered as inseparable parts of the total program of education by a growing group of educators. It may be called a "cycle" which applies to work with students, to the development of the teacher-education program itself and to the creative efforts of the student and the teacher.

Evaluation may be defined as a "complex" process which helps an individual in estimating progress or growth toward a recognized objective. It forms the basis for all-round effectiveness of an educational experience. Evaluation is a comprehensive, cooperative, and continuous process.

The need for a more effective process of evaluation in Home Science in India is acute.

Writing on "Evaluation and Its Value in a Home Economics Program," Kent aptly wrote,

> The term "evaluation" which is more likely to be used in educational literature today than the term "measurement," indicates an effort on the part of educators to broaden and enrich the concept of appraisal. Evaluation is concerned

---

[33] Cottrel, op. cit., p. 393.

> with the extent and kind of changes taking place in behaviors related to the specific objectives desired to result from a learning experience. It employs a wide range of devices designed to secure evidences of need, with special reference to need for learning, and evidences of growth in terms of the desired objectives. The process of evaluation used in relation to home experiences would be the same as the process applied to any other learning situation.
>
> Evaluation, in connection with a home experience, begins with the selection of the experience and continues through to its completion. All the persons concerned with the experience should have some part in its evaluation. This would include the pupil, her teacher, her parents, and perhaps other members of the family. Objectives for the home experience would be chosen in relation to the needs and interests of the pupil, and would be considered cooperatively by pupil, teacher, parents, and any other persons concerned. Those included in this group would agree on objectives toward which the pupils should work. They would also come to an agreement as to the pupil's present status in terms of the objective and to the types of evidence which should be recognized in assessing the amount of growth which has taken place.
>
> Too frequently, it seems, the end results of an experience are judged without reference to status when the experience was initiated. The end results may be excellent in some instances, but the amount of growth negligible.[34]

Evaluation, as already stated, not only provides a more objective, developing picture of the individual student, but also serves to indicate needed changes in various aspects of the college program.

Fleck suggests that:

> A teacher will be aided in guiding students to release their potentialities if she knows something about their attitudes, beliefs, values, social adjustment and critical thinking, needs, problems, experiences, interests, and

---

[34] Druzilla Kent, "Home, School and Community Experiences in the Homemaking Program," Vocational Division Bulletin No. 252, Home Economics Education Series No. 29 (Washington, D. C.: United States Government Office, 1953), pp. 39-40.

social sensitivity, home and family life, appreciative and human relations.[35]

These areas are closely knit to each other--knowledge about the student in any of these areas should not be considered apart or detached from the student but should be studied in relation to her total personality and her progress. In this continuing process of evaluation the students should gain a better understanding of themselves and become increasingly self-directive.

Writing on evaluation as an essential part of the student's learning activity, Cottrel and other educationists were of the opinion that:

> It is important that he [student] build attitudes toward, and habits of, evaluation that help him to become his own best critic. Often he may be the only person to commend or criticize his action in a particular situation. To be able to evaluate one's present status, to know how to appraise one's needs, to be able to propose next steps, are important aspects of growth. The ability to evaluate soundly is taught and learned as is any other part of the curriculum. Provision must be made for students to share in setting up and applying standards for the evaluation of group and individual activities and as guides for the evaluation of their growth.
>
> Attitudes and skills needed in evaluation develop as teachers and students together discuss proposals for a new study and plan classwork. Long view planning by the student and his advisor help to increase these skills. The conference of student and teacher adds new insights as individually prepared analyses of progress are compared and a common judgment determined. These and the many informal situations in which decisions are made--deciding to re-write are report, wondering why a contribution was

---

[35] Henrietta Fleck, How to Evaluate Students (Bloomington, Illinois: McKnight and McKnight, 1953), pp. 12-15.

> disregarded by the group, finding a better way to explain a point of view--all contribute to growth of the student in using evaluation effectively.[36]

Concerning techniques which may be used in evaluation growth, Wrightstone wrote:

> Techniques of evaluation range from such informal measures as teacher ratings on oral recitations and teacher-made tests to more refined and standardized measures of aptitudes, abilities, skills, interests, and attitudes, the changing concepts of the curriculum have required the evaluation of pupil growth in other areas as well, such as physical and mental health, social relationships, critical thinking, appreciations and creative expression, interests, and attitudes. In other words, new curricular emphases have required the development of new techniques of measurement and evaluation.[37]

More closely related to college teaching, however, is the evaluation of a particular course or activity. College teachers, in America, are turning more and more to students for judgments regarding the values and limitations of the experiences provided. The different plans of evaluation afford different kinds of help to the college teacher.

Both individual and course evaluation have great significance for the prospective college teacher. Reflection by the student as he participates in the various types of evaluation offers positive

---

[36] Cottrel, op. cit., p. 303.

[37] J. Wayne Wrightstone, Joseph Justman, and Irving Robbins, Evaluation in Modern Education (New York: American Book Company, 1956), p. 16.

suggestions for making evaluation an integral and essential part of teaching children and youth in a democracy.

Summary

Part I

The following points need to be taken into consideration in planning for the further development of graduate courses in the Lady Irwin College.

The staff should

a. Cooperate in developing and applying an appropriate philosophy.

b. Agree upon learning experiences in each area which afford the student opportunities to

c. Broaden the variety of experiences in the Home Science program in such a manner that they will be representative of various socio-economic groups.

Part II

It was suggested that:

a. The admission policies of the College relating to the Bachelor of Science program be made more liberal in an effort to attract a larger group of students to higher education in Home Science.

b. It was recommended that a cumulative guidance and academic file might be built for each student.

c. The subject matter courses in Home Science in the Bachelor of Science might be regrouped, placing greater emphasis upon students' needs and interests.

d. A regrouping of courses into three major programs was proposed.

Part III

The proposed Master of Science or post-graduate program would be built on the graduate program as proposed. The suggestive design has been shown in Figure 2.

The vital need for a specialized library with a better organized system offering open access to books might be of immeasurable help to students.

Examinations as they exist today might be changed to evaluation of the all-round effectivenss of an educational experience.

Provision might be made for student guidance--providing as a basis for discovering the students' abilities and aptitudes and establishing rapport.

The quality of instruction is determined by the various teaching procedures and materials used for easy and effective learning. The importance lies in the choice of effective techniques under the proper conditions used singly or in combination. Method is but a means to

an end. It is to be valued only as it contributes to a learning experience based on recognized principles of learning.

More closely related to college teaching is the evaluation of a particular course or activity. It forms an integral part of the teaching-learning process, stimulating a continuous re-assessing and re-planning designed to produce further growth.

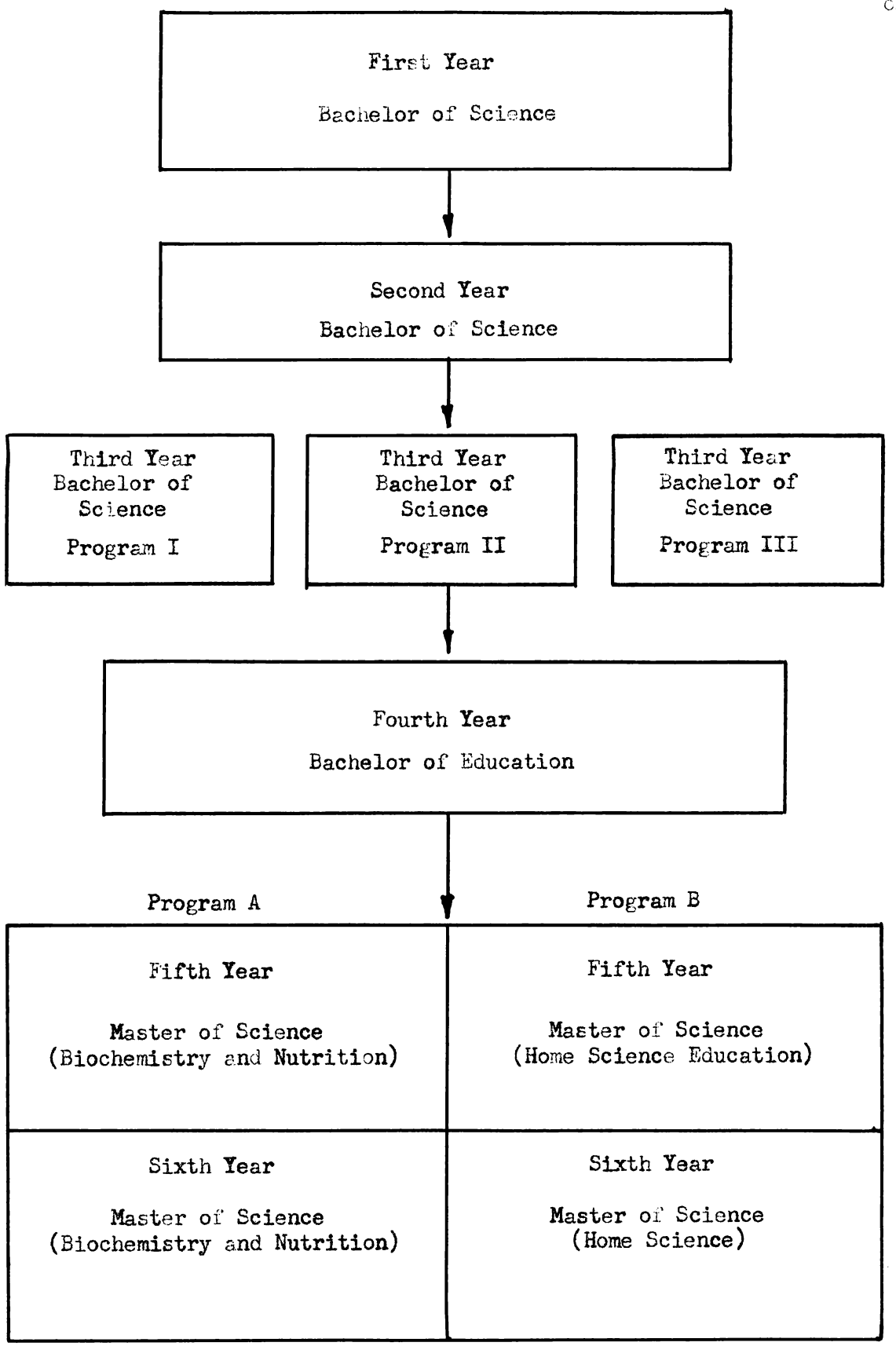

Figure 2. Proposed Programs of Work in the Lady Irwin College, Leading to the Bachelor of Science, Bachelor of Education and Master of Science in Home Science.

CHAPTER IV

THE PROPOSED MASTER OF SCIENCE PROGRAM IN HOME SCIENCE EDUCATION IN THE LADY IRWIN COLLEGE

The post-graduate division of universities must assume the responsibilities for producing leaders for the future, for stimulating the spirit of inquiry, and for preserving or building up the best traditions of learning. This is the need of the hour. As Tagore so eloquently wrote:

> Our life today needs more color, more expansion, more nourishment for all the variety of its famished functions. Whatever may be the case in other countries, we need in India more fullness in life and not ascetism.[1]

Speaking at a conference on "Home Science for Colleges," in September 1956, Dr. A. Lakshmanaswamy Mudaliar, Vice-Chancellor of the Madras University, in his inaugural address pointed out that the training of teachers in Home Science is at present inadequate and that Master's Degrees are necessary for teaching at the college level. He emphasized the necessity of having qualified personnel before graduate and post-graduate programs could be approved by the university.

---

[1] John Jesudason Cornelius, Rabindranath Tagore: India's Schoolmaster. A Study of Tagore's Experiment in the Indianisation of Education in the Light of India's History (New York: Columbia University, 1928), p. 66.

The purpose for which Lady Irwin College exists, as stated in official publications, is to train women to become:

1. Efficient teachers of Home Science in girls' institutions, and
2. Capable wives and useful members of society.

> The present upsurge of interest in Home Science as shown by large numbers of qualified applicants who are turned away each year not only from Lady Irwin College, but also from other institutions throughout the country which offer degrees in Home Science, has brought to light the lack of teachers qualified to teach Home Science specially at the college level. To help meet the need, Lady Irwin College plans to offer:
>
> a. An M.Sc. degree in the field of Biochemistry and Nutrition. This area is of vital interest to people throughout the country and has received prime consideration from the framers of both the first and second five year plans, and
>
> b. An M.Sc. in Home Science Education.[2]

The initial post-graduate programs, then, would be designated as:

Program A: (1) Master of Science in Biochemistry and Nutrition

Program B: (2) Master of Science in Home Science Education.

Program A is not considered within the province of this study; therefore, the following discussion will be concerned exclusively with Program B. It was planned, as already stated, to explore some of the factors influencing the development of Teacher Education in Home Science in the Master of Science program and to offer some suggestions for

---

[2]Unpublished Proposed Tentative Syllabus for the Master of Science Degree, Lady Irwin College, New Delhi, India, 1957. See Appendix.

consideration in formulating a sound program.

The aims as stated in the syllabus would seem to be adequate in terms of present day knowledge of the curriculum. It is questionable, however, that any staff or group of students could be expected to demonstrate achievement of many of these aims as they are stated in the syllabus at present. These statements, in too many instances, are not realistic.

The definition of education which tends to be generally accepted today stresses processes and their continuity--education is a continuous process--education is growth. The primary role of education is that of developing the abilities of the individual, helping him to adjust himself to a changing social order and to intelligently participate in directing the change. If we accept this definition we shall state our aims or objectives in ways which make it possible for the individual to demonstrate progress or growth; the important aims and objectives in life and in education may never be fully realized. Even if we realize "an understanding" of the meaning of education today we may find out understanding needing revision tomorrow in terms of the products of some research project. The world does not stand still. The same beliefs, philosophy, which have been accepted for the graduate program in Home Science will function in relation to the post-graduate program. The fundamental step in developing an effective program of higher education in Home Science is that of keeping the principles of this philosophy constantly in mind,

constantly re-examining and re-evaluating them. The staff is responsible for developing the program and could probably best accomplish this through developing a course of studies focusing attention upon this philosophy and maintaining its high standards. These ideals, however, may not be practicable. A more realistic approach might be a working agreement between staff members as to the basic concepts of philosophy which should be stressed. Each staff member, then, might stress these concepts in relation to those courses for which she is responsible.

An examination of the aims for courses included in the program, as stated in the present document, reveals that some are stated in a manner which would enable a student to demonstrate growth, for example--"some understanding of the problems of clothing and household textiles faced by families and individuals"; "planning and preparation of some teaching aids for clothing and household textiles"; etc.

These statements, however, could be improved by making them more specific. It is practically impossible to evaluate growth toward two objectives stated as one. Many of the statements, moreover, are made in such a way as to create difficulties in evaluating growth, for example--"to learn to analyze and interpret information secured from students"; "to develop an understanding of the meaning of education"; "to develop an understanding of the needs, interests and abilities of pupils at different age levels"; etc.

It is suggested, therefore, that consideration be given to restating those aims which are not specific and do not stress growth. For example, in relation to the courses dealing with the principles of education and curriculum planning it was stated that the aims of the paper were:

1. To develop an understanding of the meaning of education, of educational aims, and of educational principles.

This statement might be changed to read:

1. To develop a better understanding of
   a. the meaning of education
   b. educational aims and
   c. educational principles.

This restatement would provide a better basis for evaluation; it does not presume that a student will be expected to achieve an understanding of any of these important objectives but permits one to judge progress made toward them. And, it permits one to judge progress toward each of the three objectives. It is conceivable that a student might be able to demonstrate more progress toward objective b, for example, than toward a or c.

A study of the objectives set forth for the series of "papers" would indicate that certain specific objectives need to be considered in formulating the program. The following objectives are submitted, therefore, for consideration:

1. Gaining a better understanding of (a) the psychological and (b) the sociological functions of education.
2. Developing a better understanding of the generally accepted principles of (a) learning and (b) curriculum planning.
3. Stimulating a development of the present and latent talents and abilities in the individual student.
4. Developing a better understanding of the Home Science program (a) at the different school levels and (b) its contribution to the total school program.
5. Helping towards (a) developing a better understanding of effective approaches to curriculum construction and (b) the process of curriculum development in Home Science.
6. Helping students develop more ability in planning Home Science programs for different age levels in India.
7. Providing opportunities for (a) selecting and (b) using a variety of materials in teaching Home Science.
8. Making available experiences in developing programs of (a) vocational education and (b) adult education.
9. Gaining in ability to counsel effectively with students.
10. Developing an increasing ability in students to (a) interpret and (b) apply factual information resulting from current research in Home Science.
11. Helping students evaluate their growth.

12. Using procedures appropriate for (a) organizing (b) statistically treating and (c) practically interpreting data regarding problems selected for study.
13. Stimulating desires in students for continued growth and development both as individuals and responsible members of home, community and college groups.
14. Developing interest in (a) gaining a better understanding of democratic, home and family living principles and (b) the ability to assume individual responsibility in applying them in daily living and work.
15. Guiding students to (a) set and (b) attain high standards of knowledge and technical skills.

An educational program, to be successful, should be designed to serve the unique needs of the individuals who participate in it. This fact, like other basic principles of education, would apply to an educational program in India just as it would in any country. Any country, or educational institution, however, may profit by examining what is being done in other situations for the purpose of accepting, rejecting or modifying certain practices which would seem to offer promise of improvement. Some adaptations are usually necessary; the extent of adaptation in any given instance would depend upon the situation in which the adaptation was being made.

It is futile to attempt to transplant any foreign scheme in its original form. As Tagore pointed out:

> We cannot imitate life we cannot simulate strength for long, nay, what is more, a mere imitation is a source of weakness. For it hampers our true nature, it is always in our way. It is like dressing our skeleton with another man's skin, giving rise to external feuds between the skin and the bones at every moment.[3]

In examining the proposed program leading to the Master of Science in Home Science Education, it was apparent that major consideration was being given to the situation existing in the Lady Irwin College. However, it seemed wise to explore the possibility for making certain adaptations which might be expected to strengthen the Master of Science program. The section which follows discusses these possibilities.

1. The university session or the total number of working days in an academic year in Delhi.
2. Admissions to candidacy for the Master's Degree in Home Science.
3. Student Advisory Committee.
4. Research requirements for the Master's Degree in Home Science Education.
5. A critical review of the proposed tentative Master of Science syllabus for Home Science Education in the Lady Irwin College.
6. Need for recognizing the unique needs of students.
7. Ways for solving temporarily the shortage of (a) college staff (b) library facilities, and (c) laboratory situations

---

[3]Cornelius, op. cit., p. 49.

essential for the development of a Master of Science program in Home Science Education.

These factors are discussed in the sections below.

The University Session or the Total Number of Working Days in an Academic Year in Delhi

The various holidays for festivals that break into the smooth running of the academic year are one of the major factors that impede the progress of university studies in India.

It is encouraging to note that this problem has been recognized by the University Education Commission of 1949. The Commission has recommended that:

> The university session be divided into three more or less equal terms each of 10 to 11 weeks' duration, separated by two short vacations of two or three weeks each and one long vacation of ten to thirteen weeks. All casual holidays during the currency of each term should be severely curtailed. Every college and university should so arrange its sessional work as to ensure a minimum number of 180 working days, exclusive of examination days.[4]

The prescribed changes require many adjustments and cannot be accomplished overnight. It will take some time for universities and colleges to rearrange their total program.

It should be pointed out that there is some variation in the number of working days in American universities after years of

---

[4]Report of the University Education Commission (New Delhi: Manager of Publications, Government of India, August 1949), 1:1-67.

operating but, in general, a session constitutes nine months each year with six days a week spent in classwork or related activities. In addition, most American universities operate "summer sessions" of from six to twelve weeks duration. Students can, by taking part of their work in summer sessions, shorten the time spent in regular sessions. Many graduate students complete all of their work for the Master of Science degree by working during the regular year and attending a college or university during four twelve-week summer terms.

These plans may be helpful in considering plans for extending the term at the Lady Irwin College, but climate would probably be the determining factor in organizing summer terms.

Admission to Candidacy for the Master's Degree in Home Science Education in the Lady Irwin College

The study presented here was made during the winter and spring quarters of the 1957 school year. At that time, the only official material available was that outlined in the tentative syllabus (See Appendix, pages 137-142). This material was concerned solely with course requirements and content, it was deemed important, therefore, to consider other factors relating to the program and to make certain proposals in regard to them.

A basic factor in the success of any educational program is the type of student admitted to the program. Heavy emphasis must be placed on attracting those who are particularly gifted. Admission

efforts should be active rather than passive. The task is one of selective recruitment rather than admission; it must be properly discharged if the national interest and the academic tradition are to be served.

An application for admission to candidacy for the Master of Science degree in Home Science Education would be made in accordance with any existing rules for admission to post-graduate study in the Lady Irwin College. In addition, it is suggested that:

1. A student must have completed all of the courses required for the undergraduate and graduate programs in Home Science or their equivalents, as outlined in the prospectus of the Lady Irwin College.
2. The student during her qualifying and graduate courses must have demonstrated a satisfactory level of scholarship--not less than a second class in the "higher secondary" and college level.
3. Two academic years must elapse between the date of conferring the Bachelor's degree (Bachelor of Science, Home Science) and the date of conferring the Master's degree (Master of Science, Home Science).
4. In addition to the general requirements outlined above, those students who desire to prepare for positions as teacher trainers or as inspectresses of schools, should have had at least two years of successful teaching

experience before registering for the program leading to the Master of Science in Home Science Education.

Post-graduate work involves study that is much more intensive and extensive in character than that of graduate work.

5. Two consecutive years of full time residence would be required, usually, for completion of the program leading to the Master of Science in Home Science Education; in special cases students might be permitted to alternate a year of residence with teaching, but the program of work for the degree would have to be completed within a period of from four to six years from the date of being admitted to the Master of Science program.

Post-graduate students would be required to make an average grade of second class in all courses taken for graduate credit.

Student Advisory Committee

Once a student is admitted, the college should take certain responsibilities for her guidance and placement in order that she may secure the greatest possible benefit from her university work. The guidance could include

1. Educational guidance
2. Vocational guidance
3. Health
4. Development through extra class activities.

Each student could be assigned to a member of the faculty, who would act as her advisor. The duty of the advisor would be to assist the student in selecting her subjects, to aid her in interpreting the requirements and in planning a program of work. The primary objective of counselling is to promote an increasing ability on the part of the student for making her own decisions and solving her own problems.

The President's Commission on Higher Education in America is of the opinion that:

> An experienced counsellor can clarify for the student the purposes of higher education in general and help him to define his own educational purposes in particular. Skillful use of measures of ability, interest, aptitude and previous educational achievement will enable the counsellor to help each student develop a program of courses and activities adapted to his personal needs.[5]

The formulation of the student's program, supervision of the program development, recommendation for admission to degree candidacy, direction of research and terminal examination may be executed by the student's committee of not less than three faculty members. This committee should be formed during the quarter in which student first registers, following admission to the program. The committee's composition would be representative of principle components of each officially approved program. Speaking of this counselling staff, the

---

[5] Higher Education for American Democracy--A Report of the President's Commission on Higher Education, Volume I (New York: Harper and Brothers, 1947), p. 66.

President's Commission on Higher Education in America stated:

> The counselling staff should be large enough and varied enough in training, interests, and experiences to provide adequate guidance also in the student's adjustment to the emotional and social problems he meets on the campus. Without this guidance the student may miss the educational value of much of his college life. Without enlightened and enlightening counsel he may actually derive more harm than benefit from parts of his campus experience. An expanded counselling program is essential to full realization of the enlarging aims of higher education.[6]

The members of the students' faculty advisory committee in the Lady Irwin College would be appointed by the Directress or Dean of the Graduate School upon nomination by the department primarily concerned with each program.

Research Requirements for the Masters or the Master of Science Degree in Home Science Education in Lady Irwin College

Requirements for the Master's degree would include the successful completion of a study involving independent investigation and research such as would normally result in a thesis. Emphasizing the value of research the President's Commission on Higher Education in America declared:

> . . . It is through research that a faculty member becomes an authority, adds uniqueness to his teaching contributions, feeds his own intellectual curiosity. . . .
> Not only does research contribute to the professional growth of the faculty member, but it also may be a basic factor in providing for intellectual growth.[7]

---

[6] Ibid., p. 66.

[7] Ibid., Vol 4, p. 47.

The general pattern for a conventional thesis or the reports of problems as already mentioned, should conform to the requirements outlined by the University of Delhi for such reports.

It may be further suggested that the recommendation of a candidate for the degree by her committee would be based upon the quality of performance in the following:

1. A required written examination administered by the committee.
2. A comprehensive oral examination by the committee open to the faculty.
3. Research and course work.

A Critical Review of the Proposed Tentative Master of Science Syllabus for Home Science Education Offered by the Lady Irwin College

The syllabus for the Master of Science in Home Science Education in the Lady Irwin College, as has been pointed out, is in tentative form at the present time. The syllabus is concerned almost wholly with a description of the courses to be required for the Master of Science degree together with the aims of the paper, which is, in effect, the final examination given over each course. The statements of these aims, then, constitute the over-all objectives for each course.

1. An examination of the syllabus would indicate that the committee has suggested a comprehensive and integrated

curriculum focused on the basic needs of

a. the student,

b. the family, and

c. the community.

2. No mention was made in regard to entrance requirements but, as has been pointed out, it was assumed that students would have completed work for the Bachelor of Science and the Bachelor of Education or would be required to complete them before becoming a bona fide candidate for the Master of Science degree.[8]

The syllabus does propose additional courses in Psychology, Principles of Education and Curriculum Planning. This would seem wise since the graduate Bachelor of Science and Bachelor of Education program is crowded and does not permit thorough consideration of many important problems in education. It would seem desirable, too, in connection with the courses outlined for the Master of Science, that some opportunity be provided for observing the work of teachers in the secondary schools.

Insofar as Home Science is concerned, courses were outlined in the following areas: Clothing and Household Textiles, Foods and Nutrition, Child Development, Human Relationships, Home Management and Related Art--a series of courses which should provide each candidate with a broader understanding of Home Science, in general, and the

---

[8]See Appendix, pages 137-142.

opportunities to secure added knowledge or to develop additional skills in specific areas.

The question raised in the syllabus, "How can (the) Home Science curriculum be developed in order to help solve the life adjustment problems of youth and adults?" gives wise direction to any group concerned with organizing the curriculum. To the extent that the subject matter in each and every course can be related to the life needs of individuals and of families, we might expect to be able to bring about the particular changes in behavior which are needed to improve the home situation. Consistent with the observations cited above are the statements made in regard to the importance of

a. Helping students develop a sound basis for evaluating the broadening outcomes of college programs, including such abilities as weighing evidence, integrating knowledge, comprehending relationships, understanding and appreciating scientific methods;
b. Promoting a well-adjusted and socially effective person in the various relationships of life;
c. Developing an active and informed citizen who is prepared to deal more effectively with social, economic and political problems at the local, national and international level.

In addition, it would seem wise to stress the importance of developing a better understanding in regard to the use of techniques of critical thinking and scientific method in the solution of problems and the importance for stimulating in all courses--technical or professional,

a. initiative and

b. leadership on the part of the students.

The program of work outlined for the Master of Science is important in that it recognizes the growing importance for homemakers engaging in professions other than homemaking which may enable them to contribute to the financial support of the family. Some of the professions open to women trained as Home Science leaders in India are:

1. Teachers for colleges and higher institutions
2. Research workers
3. Government administrators
4. Principals and Directors of institutions and departments thereof
5. Personnel for foreign service
6. Writers of Home Science literature
7. Consultants on Home Science programs
8. Social service workers
9. National Extension Service workers.

The recommendations being proposed in the following section might be considered a compromise between the philosophy of individualized instruction in higher education and the philosophy stressing subject matter areas suggested in the proposed, tentative syllabus by the committee of the Lady Irwin College.

These recommendations are being suggested as an interim measure and as an evolutionary step towards carrying out a more effective program of studies in the sphere of the Master of Science Home Science Education.

Need for Recognizing the Unique Needs of the Student

A uniform pattern of higher education for all Home Science students has been proposed. It is an established fact that no two individuals are alike. Education should aim at assisting an individual to live more fully and effectively, helping her to adjust to life by developing her innate interests and aptitudes. Gallagher says:

> An educational system which dictates choices does not educate for freedom. An educational system which, having awakened men's desires to act responsibly, does not permit that action to be effective, does not educate for freedom.
> . . .
> The student should be permitted and encouraged to assume all the responsibility which it is appropriate for him to have at his level of maturity.[9]

---

[9] Buell G. Gallagher, "The Meaning and Mission of Higher Education," Current Issues in Higher Education (Washington, D. C.: Association for Higher Education, National Association of Education of the United States, 1955), pp. 5-7.

Educationists today are advocating greater flexibility and more definite planning for diverse programs rather than adhering to uniform patterns for programs in higher education.

A slight deviation might be made in the area of the thesis or paper V, of the proposed tentative syllabus, of Master of Science Home Science Education Program. In this area, the student might be given the option of choosing two or three problems from different areas of subject matter but relating to the major field of work--viz., the improvement of Home Science Education. A student teacher, for example, working in any one area of instruction might be allowed the choice of working on problems in closely related areas, for example:

1. Nursery School Education
    a. Child Development or
    b. Family Relationships
2. Textiles and Clothing Construction
    a. Textiles and Clothing Construction or
    b. Related Art
3. Extension Service in Home Science
    a. Extension Work and Adult Education or
    b. Home Demonstration Methods.

One result arising from the uniformity of pattern in the program of studies proposed by the college for Home Science might

result in an unwieldy class of students--unwieldy to the extent that the difference as to needs might be greater than the allowance for meeting them. Writing in this connection the Education Policies Commission, in the United States of America, states:

> The error is not that of thinking about higher education on a large scale, but in thinking about higher education as essentially uniform. Expansion with more carefully designed diversity of offerings and more adequate counselling to get students into the right programs is the first plank in the platform of further educational development.[10]

Furthermore, research in the science and art of teaching has established the importance of the student having a conspicuous role to play in any program of studies designed to bring about her improvement. A student of Home Science at the university level should be a mature person with a sense of responsibility. She should be able to make some choices in formulating a program of studies--choices based upon a recognition of her unique needs and aptitudes.

The gulf that exists between teacher and student in India, even at the post-graduate level, has been wide and should be bridged. A feeling of friendliness and comradeship can be brought about and the gulf bridged by having small classes or groups of graduate students insofar as is possible. Small classes should help in establishing fruitful relationships between staff and students, promoting better

---

[10] Educational Policies Commission, Higher Education in a Decade of Decision (Washington, D. C.: National Education Association of the United States and The American Association of School Administrators, 1957), p. 33.

guided study-situations and making possible individual help and advice where necessary.

Large classes have the danger of reducing "guidance" to a mere farce. Smaller groups of students or "counselling groups" help towards informal and intimate surroundings. This might serve towards realizing the much hoped for ideal "hearts and heads in colleges."

One situation which can provide for a considerable amount of individual counselling is that of the teaching experience which the prospective teacher is required to do--in other words, the student-teaching experience. The teacher in the school with whom the student works during this experience, plays a role in teacher preparation which may be equally or more important than that of any member of the college staff. It is important, therefore, that the college staff do everything possible to help her play a more dynamic role.

Some proposals which might be helpful are:

1. Bringing about closer cooperation between the school teacher, the student-teacher and supervising lecturer.
2. Developing a better and clearer concept of the school teachers' responsibility in guiding the work of student teachers.
3. Arranging for joint conferences of student-teacher and school-teacher to discuss:
   a. the work in progress,
   b. the particular aim of the methods of teaching being used.

4. Arranging for conferences of the supervising lecturer with teachers in the school and the head mistress.
5. Providing for further training in Home Science through vacation and extension courses for high school teachers who desire to improve their professional training in Home Science.

   It is suggested that:

   a. These courses carry diploma or certificate credit
   b. The summer courses be the equivalent of one year's course spread over two or three summer sessions
   c. The curriculum for the aforesaid courses be framed by the Board of Studies
   d. Courses of shorter duration and refresher courses for high school teachers be continued and as many teachers as possible urged to take them.
6. Securing technicians for short periods of time both from India and abroad to be used for helping the college staff to fill in gaps for implementing the Home Science Program.

Key Problems Facing the Lady Irwin College in Carrying Out the Master of Science in Home Science Education and Some Proposals for Solving Problems

Exploring ways for solving, temporarily, the shortage of college staff in Home Science. There is no question but that there is a serious shortage of women in India with the training needed for developing post-graduate programs in Home Science. This must be solved before smooth

and rapid progress can be made in a Home Science program at the university level.

A major problem facing the Lady Irwin College and shared by all Home Science colleges in India is the lack of trained personnel for college positions. The same is probably true for all Home Science colleges in India. The critical shortage of college teachers is apparent from the fact that in the University of Madras, only forty-eight out of ten thousand graduates have majored in Home Science. These graduates specialized only in the field of nutrition, whereas the other areas of Home Science were not represented. (These figures were taken from the Annual Report of the University of Tennessee/India Contract Team in Home Science, 1956). This shortage of college teachers may be expected to continue for a number of years. One means being used to aid in increasing the supply, of course, is that of sending students abroad to study, but this is a slow and costly process. Some other means which might be helpful are outlined below.

Co-operative arrangements with industries and professional groups might be worked out whereby qualified persons would be released from their regular positions for part-time service as college teachers. Adjustment in teaching schedules might increase the personnel available in this way. Part-time teaching may have some disadvantages; however, part-time teachers who are highly qualified are doubtless preferable to full-time teachers who are not as capable. Industry and all

scientific and technological agencies in India stand ultimately to gain or lose in the degree to which the need for teachers is met.

The President's Commission for Higher Education in America maintains that:

> Consultants from outside the college may render distinct service not only to planning groups but also to the entire faculty. Leadership makes one of the richest contributions in serving as liason between local needs and outside consultants . . . . The typical college or university has made, in the past, only slight use of consultative and other services, it should tap these resources more fully in the future.
>
> Another means of using outside resources is through participation in inter-institutional studies. Moves now under way to launch or expand regional studies of the same character are promising extensions of a valuable idea. College and university leaders would do well to explore the possibilities inherent in such voluntary and co-operative action.[11]

Writing on this matter, the University of Tennessee/India Home Science team reported that:

> Post-graduate programs [in India] must grow in areas in which colleges and universities have strong graduate programs.
>
> If a fairly free interchange can be arranged between cooperating colleges, India has the prospect for developing post-graduate work in the various fields of Home Science.[12]

---

[11] Higher Education for American Democracy, op. cit., Volume 4, p. 42.

[12] Inter University Contract Team in Home Science, University of Tennessee/India College of Home Economics, Knoxville, Tennessee, Unpublished Annual Report, Madras, India, September 30, 1956, p. 31.

The administrators of Lady Irwin College might find it worth while to consider ways for securing certain services and help from some of the "sister institutions" of the University of Delhi to help tide over some of the immediate difficulties mentioned above. The following listing of institutions and some of the areas to which they might find it possible to contribute was suggested. The exact contribution of each would have to be determined through a series of conferences between the cooperating institutions and, it was recognized that some of these suggestions might not be practicable.

Names of Institutions	Functional Subject Matter Area to be Taught
1. Central Institute of Education	1. Educational Psychology 2. Experimental Psychology
2. The Delhi Polytechnical College	1. Art in the Home 2. Textile Fabrics and their testing
3. Jamia Millia Islamia College	1. Art in the Home 2. Extension Work in Home Science
4. Institute of Social Science	1. Extension Work
5. Extension Service (Home Science Wings) Ministry of Agriculture	1. Home Demonstrations 2. Extension Work
6. Hostel of Lady Irwin College The Delhi University Cafeteria	1. Foods and Institutional Management

Furthermore, consideration might be given to introducing demonstrators or "graduate assistants" into the picture. These demonstrators might be given stipends or assistantships, as is done in America. The importance of an internship program for the prospective

college teachers was cited by the President's Commission when it said that: "A careful arranged period of supervised internship should become the very keystone of an effective preparatory program for college teachers."[13]

The internship program may help to serve a three-fold purpose:

1. Helping train future college teachers;
2. Helping to provide the student with necessary financial assistance;
3. Providing assistance for the teaching staff of the college.

Speaking of the value of graduate internships, Barzun and others give the following reflections for the consideration of the profession:

> One of the most promising developments for improving college teaching is the internship system. . . . The program is designed to help the young teacher understand what good college teaching is and develop his capacities as a teacher.[14]

The post-graduate student is the future college instructor. The college teacher needs a rich background of experience outside of purely academic classes. It would be a short sighted policy to let her leave with a Master's Degree without having helped her to be a skillful classroom performer and to better understand and serve the

---

[13] Ibid., p. 20.

[14] Jacques Barzun and others, Graduate School of Today and Tomorrow (New York: The Fund for the Advancement to Education, 1955), pp. 22-25.

community before she receives her degree.

The President's Commission on Higher Education in America recommended that:

> The inauguration of the internship program should not await the establishment or expansion of these research projects in teaching techniques. They are simply the means of providing for its constant betterment.[15]

The President's Commission, writing on the qualities which the individual faculty member of a college should possess, indicated the importance of:

> Sound scholarship, professional competence, a clear concept of the role of higher education in society, broad humanistic understanding, lively curiosity, a sincere interest in research, insight into motivation, and a sympathetic intelligent understanding of young people.
>
> No matter what may be the function of the faculty member, he should possess these qualities . . . a teacher must know how to make his subject matter alive and understandable to others and to give to students something of his own broad concept of its content and its relationship to other branches of knowledge. Further, he should be able to guide research and to counsel students. . . .
>
> . . . Collectively the faculty must realize their intellectual and social interdependence.[16]

Writing on the preparation of college teachers, the Educational Policies Commission of America remarks:

> The education of college teachers is a task which colleges and universities cannot escape. . . . A function requiring attention both in undergraduate and graduate programs. . . .

---

[15] Higher Education for American Democracy, op. cit., Volume IV, p. 21.

[16] Ibid., pp. 2-3.

> At the graduate level the prospective teacher must grow both in understanding of higher institutions and their students, and in mastery of his special field of learning and its immediately related fields. . . .
>
> Whatever orientation program may be developed at the undergraduate level, further analysis of higher education should be provided for the prospective teacher during his graduate education. Whether through required readings, departmental seminars, or other formal means, the prospective teacher should consider what a college is, what the diverse disciplines contribute to it, the nature of teaching and learning, the requisites and rewards of teaching, the freedoms and responsibilities which inhere in the academic life. A basic introduction to a scholarly career can best be given as a part of pre-service education. . . .
>
> Opportunities for preliminary experience in teaching should be increased for those who seek college teaching careers. . . . Directed exploratory experience as a teaching assistant is feasible for advanced students. . . .[17]

Improving Library Facilities

The program of studies of post-graduate students should be so built as to give time for reading and individual study. The Lady Irwin College might explore ways for giving students open access to books and materials. The post-graduate students should be allowed to go at will from stack to stack to browse among the books to their hearts' content in their free time. Except for a few rare and precious books, all books should be open to them.

But the Lady Irwin College, as already emphasized, needs to extend its library and introduce as many books as possible on Home

---

[17] Educational Policies Commission, Higher Education in a Decade of Decision, op. cit., pp. 91-94.

Science and related subjects. The growth of the library should be continuous and constant. It is an essential part of university training to learn how to read and understand writing, and the only way to learn this is to read such writing.

It is imperative, as already mentioned, that the Lady Irwin College library be greatly improved and better organized. Facilities should be provided, too, for departmental libraries. Furthermore, to help overcome the great dearth of Indian literature on Home Science it would be well to encourage publication of theses by

a. Submitting theses to journals, and magazine sections of newspapers
b. Mimeographing some theses or parts of theses for a group of colleges and government institutions
c. Persuading students to write up their work for publication in popular journals
d. Taking advantage of and sharing inter-library loans of unpublished theses.

Improving Laboratory Situations

Theory and practice of all education go hand in hand. For the fruitful development of Home Science, a good laboratory is indispensible for every area of its many sided curriculum--Child Development, Nutrition, Foods, Textiles and Clothing, Home Management, or Home Economics Education, etc.

The laboratory situation in Home Science offers unusual opportunities for good teaching.

> Its informality brings students and teacher closer together, making it easy for students to ask for help when it is needed. It also offers an opportunity for flexibility. Students may carry out different activities according to their interests and needs and be given individual responsibility to the degree that they are ready to assume it. Laboratory experiences involve many types of learning. Emphasis for the individual student may easily be placed on the kind of learning she most needs.
>
> Learning in the laboratory may be more easily tested by both students and teachers while it is going on than in non-laboratory situations. Improvement in ways of working may be observed while the job is being done. . . .
>
> Laboratory teaching challenges a teacher to make home economics function. . . .[18]

Physical facilities and laboratories have a direct bearing on the success of teaching. They may even help to indicate the status of Home Science in the university.

Laboratories may be so built as to help students in gaining opportunities to use materials and adapting background courses and skills to teaching and other professional situations. Furthermore, laboratories may also help in providing opportunities for students in gaining experience in making choices and in arranging to serve different purposes. They should suggest ways of improvising equipment and ways of providing and using space to the best advantage.

The newer trend in education emphasizing the importance of recognizing the unique needs of individuals makes it possible to

---

[18] Home Economics in Higher Education, op. cit., p. 82.

equip laboratories very inexpensively. Laboratories which are equipped in accordance with the economic standards of prevailing groups and which are so arranged as to provide for maximum flexibility are considered superior, today, and they are usually less costly than those organized in a rigid pattern.

Providing for Research and Experimentation

Outside of some small projects in nutrition, practically no research has been attempted so far in India in the field of Home Science. The need for research is vast--the "pastures fresh and new." There is a dire need for research related to home and family life in the Orient. The faculty of every institution that educates college teachers or that employs the products of such programs would do well to encourage participation in studies designed to promote better living. Support needs to be given--both financially and spiritually. As Eckert emphasizes:

> Only as the many problems of teaching are thoughtfully studied within the walls of the college and graduate school is there substantial hope of recruiting the ablest young men and women to this profession and preparing adequately for their high responsibilities.[19]

Writing on adventuring in research to improve school practices in homemaking programs, Lippeatt maintains that:

---

[19]Ruth E. Eckert, "Ways of Evaluating College Teaching," School and Society, 71:144, February 4, 1950.

> Changes in education depend upon the willingness to experiment and this may vary with individuals and groups. Most educators are continually checking the contrast between their aspirations and their achievements, and the resulting resolution or desire to do better is a very important aspect of educational change. Each . . . teacher-educator, and teacher can make a unique contribution to the on-going improvement of homemaking education. However, rather than working individually, educational groups may join forces to attack researchable problems of common concern to an over-all State homemaking program. A research program may have its beginning when the home economics educators in a State recognize the need for seeking additional evidence upon which to make better decisions and for engaging in better actions in their day-to-day activities. . . .[20]

Suggesting some ways to overcome recognized difficulties or limitations in research, Lippeatt continues:

> Educators who have participated in some action research studies report a number of obstacles, including a lack of skill in using research techniques, inability to get consultant help when it is needed, and insufficient time for such study. These problems and other similar ones suggest the need for:
>
> More emphasis in undergraduate and graduate programs of teacher education in helping homemaking teachers gain skill that will enable them to understand and study objectively their own teaching problems and to test systematically the effectiveness or proposed solutions.
>
> A challenge to use in-service conferences as a means of helping teachers develop many of the skills of scientific problem-solving in the study of their own school-community problems.
>
> Members of supervisory and teacher-education staffs to gain needed preparation and to provide time in their schedules for consultative service in this area.[21]

---

[20] Selma Lippeatt, "Adventuring in Research to Improve School Practices in Homemaking Programs--A State Approach," Bulletin No. Misc. 3512-111 (Washington, D. C.: United States Government Printing Office, 1950), pp. 1-5.

[21] Ibid., pp. 1-5.

Any teacher exploring ways for improving her work is, in a sense, engaging in research. Leaders are beginning to sense the importance for bringing small groups of such teachers together to cooperate in working toward the solution of some common problem. This device is specially important in areas where few experienced research workers are available.

Just as all teachers should continue investigation and study, so should all researchers be permitted to teach. Rarely, if ever, should the two functions be separated. Teaching and research are long established faculty functions.

> . . . The over-all assessment of the research approach focuses attention of the need for expanding and extending training opportunities for home economics education leaders.
>
> Specialists in educational research are essential in the home economics profession. The need is quite evident when one considers the ever-changing world which is increasingly dominated by scientific and technological advances. Obviously there are certain kinds of problems which can be solved only by the highly trained research specialist. Such training and skill usually require several years of preparation and practice. It is characterized by technical specialization offered in graduate schools of colleges and universities and includes intensive study of specific elements of research design, research methods and statistical analyses.
>
> . . . . . .
>
> Many leaders recognize that teaching can be researching and teachers can be researchers. Some educators are pointing out that there are many common elements in reflective thinking, the teaching process and the research process. . . .
>
> Some essential elements in planning research activities are. . .
>
> 1. Recognition of the natural-research role of persons engaged in teaching and teacher education
>
> 2. Recognition of the importance of keeping the whole research process related; viewing the total research concept.

3. Exploration of techniques which will strengthen group process and operation.
4. Development of proficiency in research techniques through repeated practice.[22]

The world can progress only through our researchers, who, through their bold and persistent attempts, delve into the future, working out better ways for a "brave new world." Light and yet more light is their constant search and the world must join them in their prayer:

Om asatho ma sadgamaya
Thamaso ma jyothirgamaya
Mrithyor ma amritham gamaya.

Lead us from unreality to reality
Lead us from darkness to light
Lead us through knowledge to self-realisation.

Upanishads

Summary

The proposed working philosophy of the admissions program to the Master of Science does not differ greatly from the philosophy expressed in the literature of the Lady Irwin College. This philosophy, summarily stated, would consider each student as a unique individual and be concerned with the development of her total personality. The college should be committed to developing an educational program for her in terms of her present needs, interests and abilities.

---

[22] Ibid., pp. 1-5.

Planned diversity among Home Science Education areas might be increased and sharpened in order to meet the needs of individual students.

Counselling might be allied with admission and with active recruitment. A more careful screening of applicants for post-graduate education might be planned. However, university education should be made available to all who can profit from it--especially those gifted with qualities of leadership.

Closer relationships between high schools and colleges should be encouraged. The teacher in the school might be helped to play a more dynamic role in the preparation of student teachers.

The pressing problem of lack of teaching personnel might be relieved by:

a. Seeking the co-operation and help from industrial and technological agencies and other "sister institutions" both from home and abroad to shape the experiences of trained personnel.

b. Introducing a carefully arranged and supervised "internship program" for graduate assistants as prospective college teachers.

Library facilities might be improved by exploring the advantages of "open access" to books and materials.

Laboratories and other physical facilities might be improved so as to provide students with a variety of experiences and help them

adapt space and equipment in different situations to the best advantage.

Research and teaching go hand in hand. As universally agreed, the prospective college teacher should be acquainted with research techniques and the spirit of independent study. This could make a definite contribution to the efficiency of the teacher.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study, relating to the exploration of factors to be considered in developing a post-graduate program of teacher education in the Lady Irwin College, grew out of a recognized need for more Home Economists to staff programs in higher education. It was observed that India was becoming increasingly aware of the value of Home Science at the college level. Little or no provision has been made toward the solution of the critical problem--the imperative need for hundreds of new well-prepared post-graduate teachers who would form a strong nucleus and help to give sustained development to all Home Science professions throughout the country. The graduates of Home Science with the Bachelor of Education degree, the highest offered, now, have been unfavorably placed when they joined the staff of schools where the majority of instructors in other areas held the Master of Science degree. The scale of pay of the Bachelor of Education (Home Science) graduates was not on a par with that of other subject teachers. A post-graduate program in Home Science Education, therefore, would seem to be a necessity.

It was observed also that the strict, rigid uniformity of the present graduate program and the proposed post-graduate program of the Lady Irwin College needed to be re-examined. The areas of study offered were vast and varied. The students found it difficult to cope with them.

The purposes of this study were:

1. To examine those factors which seemed to be most important in developing a post-graduate program of teacher education in Home Science in the Lady Irwin College, New Delhi, India.
2. To make certain recommendations for initiating the program. It was, therefore, the hypotheses of this study that the implementation of the proposed Master of Science or post-graduate program for Home Science in the Lady Irwin College might be hastened and strengthened by:
   a. Analyzing the Bachelor of Science or graduate program of Home Science in the Lady Irwin College as it exists today;
   b. Suggesting constructive changes in the curricula of studies;
   c. Proposing adaptation of some of the methods of instruction as followed in the Home Economics graduate schools of America to suit the Home Science program in Lady Irwin College.

The first step taken in the study was to secure the history, growth and other relevant data of the present graduate school (Bachelor of Science and Bachelor of Education program) of the Lady Irwin College. The proposed tentative syllabus for the Master of Science in

Home Science Education was critically reviewed. Further analysis and interpretation of the results was made in the light of the purposes and hypothesis of the study.

Conclusions

Analysis of the data secured from the Lady Irwin College regarding its present graduate program and the tentative syllabus of the proposed Master of Science in Home Science Education seemed to point to the following conclusions.

The need for:

1. Liberalizing the admission policies of the graduate school of studies, making it available to those who could profit by it, thus helping to answer the dire need for teachers in high schools.
2. A more varied and flexible curriculum designed to meet the needs of the individual student.
3. Planning more realistic experiences in terms of varied home situations.
4. Decreasing the emphasis upon preparation for university examinations and for exploring more appropriate ways for evaluating the growth of students.
5. Students should be helped to develop a better understanding of the use of some of the newer methods of instruction

designed to aid in the building of sound attitudes, in the development of critical thinking.

Recommendations

The following recommendations are based on the findings of this study and are suggested as a means of strengthening the present graduate program on which the proposed post-graduate program is to be based.

1. As a realistic approach to developing a high standard of Home Science Education, the staff should work toward an agreement in regard to the basic concepts of the underlying philosophy.
2. Every attempt should be made to provide the prospective college teacher with better understanding of a broadened, integrated program of Home Science so as to make a significant contribution to the social growth and national progress of India.
3. Entrance requirements to candidacy for the Master of Science degree be designed to promote selective recruitment. The application for admission would be in accordance with any existing rules for admission to post-graduate study in the Lady Irwin College.

4. Two consecutive years of residence be required to complete the Master's program. In addition, it is suggested that in special cases students be permitted to alternate a year of residence with a year of teaching, but the program of work would have to be completed within a period of six years from the date of admission.
5. Each student have an advisory committee of not less than three members who would counsel with her in regard to her program development, direction of research and examinations.
6. Provision be made for greater flexibility in the Bachelor of Science program of studies which would be regrouped to offer:
   a. A "core curriculum" for the first two years of study.
   b. A year of specialization during the third or final year.
   c. In the area Paper V or thesis for the Master of Science program, the student be given the option of choosing two or three problems from different areas of subject matter but relating to the major fields of work.
7. Enhancing the cooperation of school teachers, student teachers and supervising lecturers to promote greater enjoyment in teaching and provide more stimulative selection for the student teachers.
8. Vacation or extension courses be provided for high school teachers deciding to improve their professional training

in Home Science. It was further recommended that these courses carry diploma credit.

As an interim measure for helping solve the shortage of teachers, cooperative arrangements be made with industries and professional groups in India and abroad to employ qualified persons or technicians for part-time service as college teachers.

Consideration be given to introducing the "internship program" as an effective preparatory program for college teachers, as is done in the United States of America.

Library facilities be improved and extended and students be given "open access" to books and materials.

Physical facilities--space, equipment and laboratories--be improved and expanded to meet the needs of the post-graduate program.

Provision be made for encouraging basic research and the publication of the findings.

BIBLIOGRAPHY

BIBLIOGRAPHY

Abhedanda, Swami. India and Her People. New York: Vedanta Society, 1906.

American Home Economics Association. Home Economics in Higher Education. Washington, D. C.: United States Department of Health, Education and Welfare, Federal Security Agency, Office of Education, 1949.

Anjaria, F. India's Five Year Plan. New Delhi: Indian Information Service, 1952.

"Annual Report by the Inter-University Contract Team in Home Science, University of Tennessee/India." Madras: Unpublished Report, 1956.

Arundale, Rukmini Devi. The Future of Education in India. New Delhi: Publications Division, Ministry of Information and Broadcasting, Government of India, 1954.

Axelrod, J., Bloom, B. S., and others. Teaching by Discussion in the College Program. Chicago: The University of Chicago Press, 1949.

Barzun, Jacques. Graduate Schools of Today and Tomorrow. New York: The Fund for the Advancement of Education, 1955.

Beasley, Christine. Democracy in the Home. New York: Association Press, 1956.

Birdwood, Sir George C. M. The Industrial Arts of India. London: Chapman and Hall Ltd., 1880.

Bostwick, Prudence. One Hundred Years of Curriculum Improvement, 1857-1957. Washington, D. C.: National Education Association of the United States and the American Association of School Administrators, 1957.

Clewell, Geraldine. "A Proposal for the Maintenance and Improvement of Effective Instruction in Home Economics at the College Level." Unpublished Ph. D. thesis, Ohio State University, 1953.

Coon, Beulah I. Home Economics in Colleges and Universities of the United States. Washington, D. C.: United States Department of Health, Education and Welfare, Federal Security Agency, Office of Education, 1957.

Cornelius, John Jesudason. Rabindranath Tagore: India's Schoolmaster. New York: Columbia University, 1928.

Cottrel, Donald P. Teacher Education for a Free People. New York: The American Association of Colleges for Teachers of Education, 1956.

Cousins, L. M. Indian Womanhood Today. Allahabad: Kitabistan, 1941.

Current Trends in Higher Education. Washington, D. C.: National Education Association of the United States and the American Association of School Administrators, 1948, 1950.

Desai, Lalitha Manibhai. "Proposals for the Development of Education in India Derived from a Synthesis of Occidental and Oriental Sources." Unpublished Ph.D. thesis, University of Michigan, Ann Arbor, 1948.

Deulkar, Durga. "An Approach to Teaching in Basic Schools of India with Special Reference to Home Economics." Unpublished Master's thesis, College of Home Economics, University of Syracuse, 1954.

Doherty, Robert E. The Development of Professional Education. Pittsburgh: Carnegie Institute of Technology, Carnegie Press, 1950.

Domas, S. J., and Tiedeman, D. V. "Teacher Competence: An Annotated Bibliography," Experimental Education, 19 (December 1950), 101-218.

Eckert, Ruth E. "Ways of Evaluating College Teaching," School and Society, 71 (February 4, 1950), 65-69.

Education Quarterly. Delhi: Ministry of Education, Government of India, 4 (1952), 6-10.

Educational Policies Commission. Higher Education in a Decade of Decision. Washington, D. C.: National Education Association of the United States and the American Association of School Administrators, 1957.

Fleck, Henrietta. How to Evaluate Students. Bloomington, Illinois: McKnight and McKnight, 1953.

Gallaher, Buell, G. "The Meaning and Mission of Higher Education," Current Issues in Higher Education. Washington, D. C.: National Education Association of the United States and the American Association of School Administrators, 1955.

Guthrie, E. R. "The Evaluation of Teaching," Educational Record, 30 (April 1949), 109-15.

Kabir, Humayun. In Our Heritage. Delhi: National Information Publications, Manager of Publications, Government of India, 1950.

Kelly, Fred J. "Toward Better College Teaching," Bulletin No. 13. Washington, D. C.: United States Department of Health, Education and Welfare, Federal Security Agency, Office of Education, 1950.

Lehman, Ruth. Appraising the College Program in Home Economics. Washington, D. C.: American Home Economics Association, 1950.

Lippeatt, Selma. "Adventuring in Research to Improve School Practices in Homemaking Programs--A State Approach," Misc. Bulletin 3512-111. Washington, D. C.: United States Department of Health, Education and Welfare, Federal Security Agency, Office of Education, 1957.

Maaske, R. J. "What Is Good Teaching?" Education Forum, 13 (January 1949), 226-27.

McGrath, Earl J. and others. Social Science in General Education. Dubuque, Iowa: Brown and Company, 1948.

Ministry of Education. Aims and Objectives of University Education in India. Delhi: Government of India, 1949.

Nehru, Jawaharlal. Independence and After. Second impression. New York: The John Day Company, 1950.

Orleans, J. S., and Kehm, H. D. "Instructor Training," Journal of Higher Education, 20 (October 1949), 360-6.

Palmquist, Edward M., and Drummond, Donald F. Toward Better Teaching (With Bibliography). University of Missouri, 1951.

Pannikar, K. M. Basis of Indian Culture (A Universal Outlook). Washington, D. C.: Information Service of India, 1955.

Prasad, Dr. Rajendra. "Address to Inter-University Board of India and the Executive Council of the Association of the Universities of the British Commonwealth," Education Quarterly (New Delhi: Ministry of Education, Government of India, March 1952).

Prospectus, Lady Irwin College, New Delhi, India, 1956.

Radhakrishnan, S. Religion and Society. London: George Allen and Unwin, Ltd., 1947.

Rasey, Marie I. This Is Teaching. New York: Harper and Brothers, 1950.

Report of the Secondary Education Commission. Delhi: Ministry of Education, Government of India, 1953.

Report of the Seminar on Examinations. New Delhi: All India Council for Secondary Education, 1956.

Report of the University Education Commission. New Delhi: Manager of Publications, Government of India, 1 (August 1949), 1-67.

Roy, S. C. Curriculum for Extension Home Science, Gram Sevikas. New Delhi: Government of India, 1956.

Sanjiva, Rao, B. The Future of Education in India. Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India, 1954.

Small, George D. "Selective Admission Policy and Procedure," Current Trends in Higher Education. Washington, D. C.: National Education Association of the United States and the American Association of School Administrators, 1948.

Smith, E., and Tyler, R. Appraising and Recording Student Progress. New York: Harper and Brothers, 1942.

Tara, Bai B. All-India Home Science Conference. Madras, India: The Women's Christian College, September 1952.

Taylor, Harold, and others. Essays on Teaching. New York: Harper and Brothers, 1950.

Tead, Ordway. College Teaching and College Learning. New Haven, Connecticut: Yale University Press, 1949.

Tyler, Ralph W. Basic Principles of Curriculum and Instruction (Syllabus for Education). Chicago: University of Chicago Press, January 1950.

Wright, Dr. Ruth. "Home Science and Higher Education." Second Biennial Conference Home Science Association of India. New Delhi: Lady Irwin College, 1956.

Wrightstone, J. Wayne, Justman, Joseph, and Robbins, Irving. Evaluation in Modern Education. New York: American Book Company, 1956.

APPENDIX

APPENDIX

The Members of the University Education Commission[1]

The following were appointed members of the Commission:

1. Dr. S. Radhakrishnan, M.A., D.Litt. L.L.D., F.B.A., Spalding Professor of Eastern Religions and Ethics at the University of Oxford (Chairman).

2. Dr. Tara Chand, M.A., D.Phil. (Oxon), Secretary and Educational Adviser to the Government of India.

3. Dr. (Sir) James F. Duff, M.A., Cantab, M.Ed. (Manchester), L.L.D. (Aberdeen), Vice-Chancellor, University of Durham.

4. Dr. Zakir Hussain, M.A., Ph.D., D.Litt., Jamia Millia Islamia, Delhi (now Vice-Chancellor, Muslim University, Aligarh).

5. Dr. Arthur E. Morgan, D.Sc., D. Eng., L.L.D., Former President, Antioch College, First Chairman, Tennessee Valley Authority, President, Community Service, Inc.

6. Dr. A. Lakshmanaswami Mudaliar, D.Sc., L.L.D., D.C.L., F.R.C.O.G., F.A.C.S., Vice-Chancellor University of Madras.

7. Dr. Meghnad Saha, D.Sc., F.R.S., Palit Professor of Physics, Dean, Faculty of Science, and President, Post-Graduate Council of Science, University of Calcutta.

8. Dr. Karm Narayan Bahl, D.Sc., (Panj.), D.Phil. and D.Sc. (Oxon), Professor of Zoology, University of Lucknow.

9. Dr. John J. Tigert, M.A. (Oxon), L.L.D., Ed.D., D.C.L., D.Litt., L.H.D., formerly Commissioner of Education of the United States, and President Emeritus of the University of Florida.

10. Shri Nirmal Kumar Sidanta, M.A. (Cantab.), Professor of English and Dean, Faculty of Arts, University of Lucknow, Secretary.

---

[1]The Report of the University Education Commission, December 1948-August 1949 (Delhi: Manager of Publications, Government of India), 1:1.

RESULTS OF EXAMINATIONS, LADY IRWIN COLLEGE, NEW DELHI, INDIA[a]

Year	Number Appeared	Number Passed	Pass Percentage
	Bachelor of Science Examination		
1951-1952	9	7	78
1952-1953	18	12	67
1953-1954	30	24	80
1954-1955	44	34	77
1955-1956	48	42	87
1956-1957	60	60	100
	Bachelor of Education Examination		
1952-1953	4	4	100
1953-1954	4	4	100
1954-1955	15	15	100
1955-1956	16	16	100

[a]Unpublished letter from B. Tara Bai, Lady Irwin College, June 6, 1957.

T E N T A T I V E (1957)
Master of Science in Home Science
First Year (Previous Examination)
(First Draft)

		Marks
Paper I.	Psychological and Sociological Foundations of Education	100
Paper II.	Principles of Education and Curriculum Development	100
Paper III.	Clothing and Household Textiles	75 + 25
Paper IV.	Foods and Nutrition	75 + 25
Paper V.	Methods of Evaluation, Research and Statistics	100
	Second Year (Final Examination)	
Paper I.	Methods of Teaching and Teaching Practice in Home Science	75 + 75
Paper II.	Child Development with Nursery School Experience	100
Paper III.	Human Relationships--Personal, Family, Social	100
Paper IV.	Housing, Home Management and Household Equipment	75 + 25
Paper V.	Thesis	

TENTATIVE - Psychological and Sociological Foundations of Education. It is expected that this paper will deal with topics such as those now included in Paper II of the present Bachelor of Education Syllabus and Paper I and II of the present Master of Education Syllabus.

TENTATIVE - Principles of Education and Curriculum Planning. The aims of this paper:

1. To develop an understanding of the meaning of education, of
   (a) Educational aims, and
   (b) Educational principles.
2. To develop an understanding of the home science program at different school levels and its contribution to the total school program.
3. To develop ability to plan home science programs for different age levels.
4. To become aware of the contribution that home science education can make to individuals and families.
5. An understanding what is involved in curriculum planning.

It is expected that this paper will include topics such as are now included in Paper I of the Bachelor of Education. In addition, it will deal with the following:

1. Definition of curriculum
2. Philosophy of curriculum construction: What are the objectives of the home science program and how are they compatible with the objectives of general education? How can home science curriculum be developed in order to help

solve the life adjustment problems of youth and adults. Philosophy of education and psychology of learning as guides in selecting educational objectives in Home Science. Who is responsible for and has a contribution to make to the development of the school curriculum? The roles of the teacher, administrator, pupils and citizens. Special problems in curriculum development.

3. Process of curriculum development. Clarification of questions, problems, issues in the development of curriculum. Areas of needs that determine the curriculum. How are needs determined? What educational experiences can provided that are likely to meet these needs? How can educational experiences be effectively organized? How can we determine whether purposes are being attained?

Clothing and Household Textiles

The aims of this paper are to develop:

1. An appreciation of the role of clothing and textiles in the total program of Home Science.
2. Some understanding of the problems of clothing and household textiles faced by families and individuals.
3. Ability to solve various types of family problems in clothing and household textiles.

The paper will deal with such topics as:

1. The place of clothing and textiles in maintaining family health and happiness.
2. The effect of different methods of production and distribution of clothing and textiles on price, quality, etc.
3. The inter-relationship of the problems of producers, distributors, and consumers of textiles and clothing.
4. The importance of individual differences in determining individual needs for clothing.
5. Planning for adequate clothing for families at different income levels.
6. Knowledge of information available to consumers through labels, publications, organizations, etc.
7. Selecting textiles for clothing and household use in terms of performance, serviceability and economy.
8. Developing skills in using short-cut methods in construction of clothing.
9. Planning teaching aids for clothing and/or household textiles.

Dress and Design in Clothing

1. Selection for an individual color, line, proportion and materials suitable for different figures.
2. Some figure defects and how to correct them in tailoring.

Home Furnishing

1. Selection and making of slip covers, etc.
2. Care of garments--storage.
3. Chemical analysis of various fabrics.
4. Advanced study of color and designing in embroidery (clothing and garments).
5. Original designs--for embroidery (floor decoration, etc.).

Methods of Evaluation and Research

The aims of this paper are:

1. To become aware of the purposes of evaluation in teaching and learning.
2. To become familiar with a variety of evaluation devices and to consider how to use them effectively.
3. To learn to analyze and interpret information secured from students.

The paper will deal with such topics as:

1. The need for and functions of evaluation.
2. Beliefs about and trends in evaluation.
3. Methods of evaluation.
4. Desirable characteristics in evaluation instruments and procedures.
5. Stating goals in terms of behavior desired and choosing appropriate methods of evaluation.
6. Construction and use of evaluation instruments and techniques.
7. Reporting achievement of pupils.
8. Methods of research and importance of educational research.
9. Types of experimental designs.
10. The selection and definition of a problem.
11. Tabulation of date and graphic representation.
12. Measures of central tendency (averages). Correlation: Meaning and calculation by product moment and rank.
13. Problems needing solution in the field of Home Science.

Methods of Teaching Home Science and Related Subjects

The aims of this paper are to develop:

1. An understanding of the needs, interests and abilities of pupils at different age levels.
2. To develop an understanding of and some skill in using effectively a variety of methods in the classroom.
3. An understanding of and ability to use teaching methods and techniques that contribute to an effective and satisfying teaching-learning experience.
4. To become aware of the factors that are most conducive to learning.

The paper will deal with such topics as:

1. The characteristics and responsibilities of successful home science teachers.

2. Preparation needed for successful teaching.
3. Philosophy of Home Science education.
4. Influence of beliefs upon planning and teaching.
5. Pupils homes, families and the community
   a. How they determine what is taught in home science
   b. Ways to get needed information as a basis for planning curriculum
6. Planning the Home Science program
   a. Yearly plans
   b. Unit plans
   c. Daily plans
   d. How to do effective teacher-pupil planning
   e. The place of parents and other adults in planning Home Science programs
7. Guiding students learning
   a. Basic principles of learning
   b. Problem solving
   c. Group discussion
   d. Lecture
   e. Practicals
   f. Demonstrations
   g. Field trips
8. Home Science for adults
   a. Differences in teaching adults and high school or college students
   b. Purposes of programs for adults national extension scheme for their adult education
9. The importance of audio-visual aids in education
10. Types of audio-visual aids and their use
11. Evaluating teaching materials.

Child Development

This paper will be built on Paper VII of the Bachelor of Science.

Human Relationships

The purposes or aims of this paper are:

1. To develop a better understanding of herself in relation to her family, community and others.
2. To realize that individuals differ and that others face common adjustments.
   a. Relationship between husband and wife--marriage as an institution, purpose, arranged and love marriages, joint family system, social economic factors in marriage.
      (1) Marriage--planning of children--point of view, lawyer's point of view--legal, religious point of view.
   b. Choice of a partner

c. Relationship between husband and wife
d. Happy adjustments of different personalities in marriage--e.g., tolerance, understanding, etc.
e. Making of a home
f. Importance of a happy married life
g. Attitude of parents and others in the family towards children
h. Mental and physical development of the child on various stages and formation of habits (mental, emotional, etc.)
i. Role of the father, mother and family in influencing the development of personality and character
   (1) General education given by parents to children--preparation of young person for marriage
   (2) Religious and moral treatment of young child
   (3) Parents treatment of the adolescent child, problems and how to deal with them.

Child Psychology

1. Relationship of family and its influence on each other
   a. Family as a personal and social institute
   b. Importance and essentials of a happy family life and its influence
   c. Family as a democratic unit in a democratic society--What factors within our society are threatening stability of a family? Joint family and individual family
   d. Social customs of Indian family (Indian festivals)
   e. The changing family and reasons responsible for the change in living mode, manners and philosophy of life
2. Family experiences build personality
   a. Understanding, guidance and discipline
   b. Problems and how to make adjustments
   c. Social behavior and relationships (Inter-State Social Relationship). Social and economic conditions and their implications
   d. Importance of understanding, tolerance and adjustment towards each other in the family, community and outside the community
   e. Inter-personal relationships.

Home Management

1. Housing
   a. Plan--How a housewife would plan for own house bearing in mind her meals and requirements
   b. Planning and cleaning schedule--conserving time and energy--labor saving devices--modern equipment saving of time and labor

c. Selection and care of cleaning equipment

2. Home furnishing
   a. Selection and care of furniture and furnishings
   b. Household equipment--purchase and value
3. Related art
   a. Principles and design of decoration and furnishings
   b. Use of color
   c. Influence of the past--auction trends (Ellora and Ajanta caves)
   d. Selection of furniture and furnishings--design, color, etc.
   e. Problems of combining the old and the new
   f. Art during different festivals of India--flowers, worship, floor decoration, etc. Interior decoration. Visits to places of interest.